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Vol. CLXX No. 2216 WITH WHICH IS INCORPORATED THE GRAPHIC JULY 11 1942

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HAWK MAJOR Two-seater (bottom). The prototype of this famous plane, fitted with a Gipsy III engine, was flown by Tommy Rose in the 1934 King's Cup Race, gaining a popular second. MacGregor and Walker flew a Hawk Major from England to Australia in five days, fifteen hours, a single-engine record that stands to-day.

FALCON Four-seater (centre). This was the designers' first real cabin aeroplane, but in all other respects was similar to the Hawk Major. Fitted with a Gipsy VI engine, a Falcon was piloted to victory by Tommy Rose in the 1935 King's Cup Race. Two Hawk Trainers also secured second and third places. A Miles Aircraft Sparrowhawk completed an outstanding day by winning the speed prize, and was first to finish, although unplaced on handicap time.

MERLIN five-seater (top). Built to the specification of Birkett Airways to carry a pilot, four passengers and luggage with a 200-h.p. engine, this aeroplane, developed from the Falcon, was soon flying on regular services at home and abroad.

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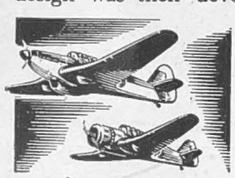

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Volume CLXX No. 2216

The SPHERE, London, July 11, 1942

THE SPHERE

With which is incorporated "THE GRAPHIC"

The Empire's Illustrated Weekly

THE PROBLEM OF TANK SUPERIORITY, UPON WHICH THE BATTLES IN LIBYA HAVE REVOLVED: THE ULTIMATE SUCCESSOR TO THE "GENERAL GRANT" IS THE NEW "GENERAL LEE" SEEN ABOVE, WHICH IS NOW BEING PRODUCED IN GOOD NUMBERS IN THE U.S.

Much of the criticism of the fighting in Libya has been concerned with the speed, fire-power and general effectiveness of the tanks used by the British forces as compared with those at the command of the Axis. It is now generally conceded that the American-built "General Grants," which formed the spearhead of the 8th Army's armour, were good but somewhat slow; that their fire-power was considerable, but the arc of fire was somewhat restricted. Already, however, our American allies are hard at work producing a successor to the "Grant": this is the "General Lee," of which we give a picture above. This improved Mark III tank weighs 30 tons with its built-up high turrets, of which it will be noted there are *three*: the speed is 30 m.p.h. with a cruising range of 350 miles and at a consumption of two miles per gallon. The "Lee" is built of non-shatter rolled-steel armour-plate, with the turret and certain fronting parts weighing over six tons. The hull is welded to the frame; power is provided by a Wright aero-engine of 400 h.p. mounted at the rear. The 75-mm. Field Artillery gun has a 30 deg. traverse and a 45 deg. elevation: there are also a 37-mm. anti-aircraft and anti-tank gun with a 60 deg. elevation; four ·30 machine-guns with all-round traverse; and several hand machine-guns. The "General Lee" carries a crew of seven: it is built by the Chrysler Corporation and the Baldwin Locomotive factory. Its dimensions are: 9 ft. wide, 9 ft. high, and 22 ft. long

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A WAR NEWSLETTER—No. 149

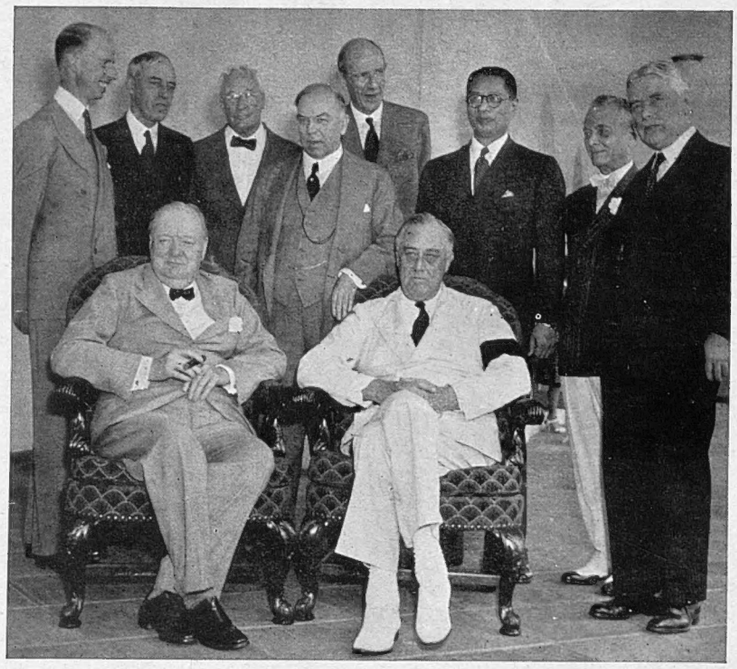
1, NEW OXFORD STREET, W.C.1.

Something the Matter.—

"There is something the matter with our ———— ships to-day," said Admiral Beatty on a famous occasion during the Jutland Battle. At the moment, rightly or wrongly, it seemed to him that the main Battle Fleet was not acting according to the Nelson tradition. Time and reflection may have revised his opinion. I don't know. At a most critical moment when the left and right pincers of Hitler's drive Eastwards to oil were fastening on Sevastopol and Alexandria, the House of Commons was debating the conduct of the war by Mr. Churchill's Government. The debate ended, as such debates during this war do, leaving Peterkin's question unanswered: "And what good came of it at last?" The evil which came of it was clear for all to see who read the overseas Press and listen to world broadcasts. One impression remained, an impression which urgently requires to be expunged: "There 's something the matter with our ———— ship of State to-day." What is it and where is it? Is it the common people, or the rank and file of our fighting Services? There are weak spots in every community. But the evidence is conclusive and overwhelmingly strong that the average citizen has shown up well, as well as ever in our history of crises, and that our sailors, soldiers and airmen have fought and endured and shown courage and cheerfulness equal to the best of their fighting forefathers. Yet the history of the war shows a predominant series of bitter reverses, of retreats, abandonments of territory and arms and stores, and generally of failure, despite the offset of glorious achievements of which the Battle of Britain, the campaign in Abyssinia and some great naval occasions stand out. On balance, Britain (her many handicaps not generally appreciated) has lost in reputation as a fighting nation. Is it failure of military leadership? Do we observe that this war has thrown up fewer great leaders in Britain than in former wars? It is a question not easy to answer. Wavell, Cunningham, Somerville . . . we have pinned our faith on these and others at various times. Time and stress have worn some of them out, and some of them passed from active command before the most need for them came. Great or average, leaders in the field can achieve nothing unless the Statesmen behind them are efficient, and back them up. No leader in the field can fairly complain that in this war he has failed to receive the loyal support and generous trust of the Government at home. Loyalty is Mr. Churchill's overriding "loyalty" and trump card. We loathed the insecurity of tenure and the victimisation of the last war. Have we gone to the opposite extreme? Has loyalty gone too far?

An Ugly Suspicion.—

One ugly suspicion grips us by the throat. It has done so since this war started. It needs to be explained, clarified and dissipated, for it may be a baseless, unjustifiable suspicion, but it is certainly a dangerous one. It is this: that ever since the war started, the niceties of party strategy or (to put it less unfavourably) fear of loss of unity by failure to secure a fair "balance of power" among the old political parties, has been the guiding principle in the selection of men for key posts in the Government. Middle-aged men lose the facility for hero worship. It is easy enough to say and to believe that Minister X is a second-rate man and Minister Y does not carry the guns for high office in war. Nevertheless, men must always be judged by their achievements, not least in wartime, and certain weak links in the present Government obstinately stand out and obstinately escape replacement. It is difficult to understand why they bear this charmed life except by the explanation that the Premier has a loyalty to the political considerations which governed his long Parliamentary career, considerations which the public long since have *scrapped*. We ask ourselves whether his fears, if he have them, are justified. Does the question of "party balance" and "equal rights" among the old political groups to have their quotas of representatives in the War Government, possess an importance in securing unity of effort to-day; and can that importance (if any) be compared with the overriding need of choosing the best men, whatever their political label?



THE MEMBERS OF THE UNITED NATIONS AT THE MEETING OF THE PACIFIC WAR COUNCIL IN WASHINGTON ON JUNE 25, 1942: A picture taken at the conclusion of the meetings held in the White House, at which Mr. Winston Churchill and President Roosevelt were present. Standing behind the two leaders are: (left to right) Dr. E. Van Kleffens (Netherlands Foreign Minister), Sir Owen Dixon (Australian Minister to the U.S.), Mr. Leighton McCarthy (Canadian Minister to the U.S.), Mr. Mackenzie King (Prime Minister of Canada), Lord Halifax (British Ambassador to the U.S.), Mr. T. V. Soong (Chinese Foreign Minister), Senor Manuel Quezon (President of the Philippines), and Mr. Walter Nash (New Zealand Minister to the U.S.)

Untrammelled Leadership.—

If Mr. Churchill has no such fear, holds no such beliefs, he would do a service to himself, to the Government and to the people, if he declared it unequivocally, and took his stand on a declaration that every man he had chosen for high office was in his opinion the best man available for the job he holds. That there is an uneasy feeling in the country that party considerations still carry weight in Government and Parliamentary circles is evidenced by many hints and signs. Amalgamated and arranged, these pointers seem to lead to a half-formed longing on the public's part for some directing influence set above party and above politics—the sort of benevolent but wisely autocratic influence exercised between 1880 and 1900 by Queen Victoria—over her Ministers. No doubt it is still true to say that the sovereign of one epoch would be an impossibility a decade after his demise—for the evolution of our ideas of democratic sovereignty move swiftly. But that interesting suggestion by Sir J. Wardlaw-Milne that the Duke of Gloucester should be appointed C.-in-C. held more than passing interest. It seemed to me the voicing of that half-formed, half-comprehended longing for leadership *above party and outside politics*.

The Danger of Boasting.—

The danger of Ministerial boasting and promising is ever present to my mind, and the whole subject is a mystery to me. I am constantly irritated by the indignity of it, and constantly puzzled by this persistent habit, which is so often proved futile and dangerous. It is well illustrated in the short history of our so-called "1,000-bomber raids." The first of the series took place, I think, on May 30, and another followed a day or two later. Immediately after the second, Sir Archibald Sinclair, in a very exuberant speech, left the public under the impression that these raids thenceforth were to be a regular item in our offensive by air. The Germans, to counter, and to console the German population, argued that we couldn't keep up such raids, because we couldn't afford the losses (which average about 45 machines per 1,000-bomber raid—say 180 trained airmen). Then followed a three-weeks interval—due, no doubt, in part to weather conditions. But the interval comprised the fall of Tobruk and our bitter reverses in Libya. Towards the end of the lull, articles began to appear in the Press commenting on the lull, and seeking to account for it, and a statement, apparently inspired or authorised by some Air Ministry news service, admitted that bombers were urgently needed on other fronts. No sooner was this explanation made public, when the third raid of the series was made on Bremen (and I dare say, before these lines see print, others will have followed). The point and puzzle which I wish to stress are these: What was gained and what risked by Sir Archibald's lurid boasts about laying waste every industrial city in Germany in regular routine? What did his words say louder than his bombs? Their only effect, so far as I can judge, was to raise in Britain itself false hopes and equally false disappointment. Clearly, it was all part of that obscure "policy of propaganda" pursued by the Government and utterly incomprehensible to the public. The Air Minister, by this time, must be experienced in the dangers of heady talk, for he has observed its disastrous effect a score of times. Clearly, then, he was serving a policy of propaganda which the Government deemed necessary at that juncture. Was it to "answer" critics of the British aggressive spirit in America; was it to offer a token payment to Russia, pressing for a second front; was it to give a stimulus to a flagging (?) British morale; or to keep on the fence certain neutrals wobbling on to the Axis side of the field? It may have been due to all or any of these reasons; but were its results worth its risks? We know that those very boasts induced *at home* a sense of doubt and disappointment when a three-weeks lull (largely due to the weather) intervened to interrupt the "series." I cannot avoid the conclusion that Ministers' actions speak louder than Ministers' promises and boasts, and that we still measure the stature of our Ministers by what they achieve, and not by what they promise; that their deeds speak quite loud enough to the enemy, to neutrals and to Britain; that all boasts and promises are dangerous, and undignified; and redundant, too, since, if Ministers are to do their jobs properly, they have no time for the luxury of oratorical flights.

The Petrol Muddle—

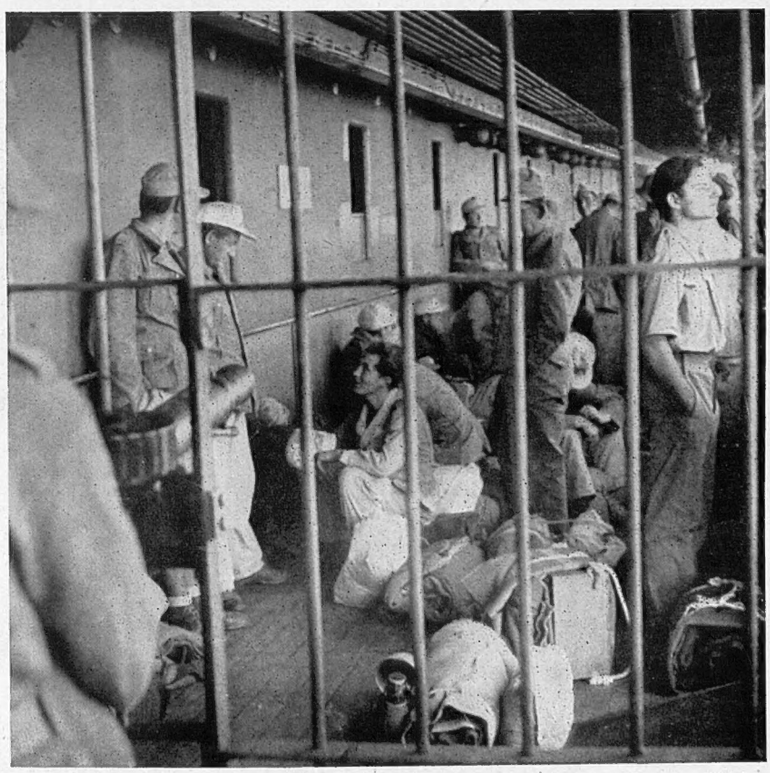
These are no times for petulant criticism. But those of us who have loudest and longest criticised the insensate waste of petrol in the first years of war both by military and civilians, are entitled to point out the muddles and dangers of the new rationing scheme. Civilians to-day can get no petrol for convenience, only for vital necessities. But the scheme has been launched without that careful preparation essential to its success and to the least disturbance of the nation's work. The public has been kept in the dark as to the state of petrol supplies, the visible reserves, the increasing difficulty of importation, the increasing demands for new theatres of war. The grants differ in different controls, the bases of allotment differ. The officials themselves do not know what is "essential work." It is perfectly clear that a great deal of work hitherto regarded as essential must be scrapped to meet a new crisis. Take the case of a woman magistrate, badly needed on the children's panel. She lives 1½ miles from a bus stop on a "two-hour" route. She is, of course, cook-general and gardener and has a young family. Her preoccupations have included hitherto W.I., local nursing and salvage collection, for in her rustic area the R.D.C. "writ does not run." Her Bench sits at 11 a.m. usually until 1 p.m. She must catch the 9 o'clock bus. That means she must leave her house at 8.30 a.m. She may get back by the 3 p.m. bus from the Sessions town which will bring her home by 4.15 p.m. Clearly she has got to give up the Bench, the salvage duties, the nursing and the W.I. Everybody knows now what cooking and looking after a vegetable garden in summer mean. The job does not admit of spending 8 hours in what can be done in 3 hours. What *is essential*? Someone must sit on Petty Sessional benches. Someone must bring waste paper to central dumps. Someone must continue the work of local nursing and W.I. No one who performs these jobs regards them as Large Beer. Most of us wish we were held to be fit for more spectacular tasks. But they are part of the general war effort, and this petrol scheme is shattering that effort through being launched in a belated panic without forethought, definition or pre-adjustment. Clearly the quota on the Bench must be reduced, local authorities must be forced to extend their range for salvage collection, local institutions must be reorganised. These matters should all have been settled before. And on the top of this chaos, comes chaos in the Home Guard, due to the same lack of preparation and imagination. At a vital time in its progress the Home Guard is suddenly immobilised, just when the need for training is most urgent. Only one car may be licensed per company, even in a rural district covering 30 square miles. In my case, that car is the Company Commander's. He is a magistrate and lives in a remote area. He has been refused any civilian petrol and therefore has laid up his car as from June 30. His second in command and neighbour (also a magistrate) has got a little civilian petrol but cannot be supplied with Home Guard petrol. No doubt in time (is there *always* time?) this *reductio ad absurdum* will produce a workable scheme more carefully thought out. At present, all is chaos.

THE OLD STAGER

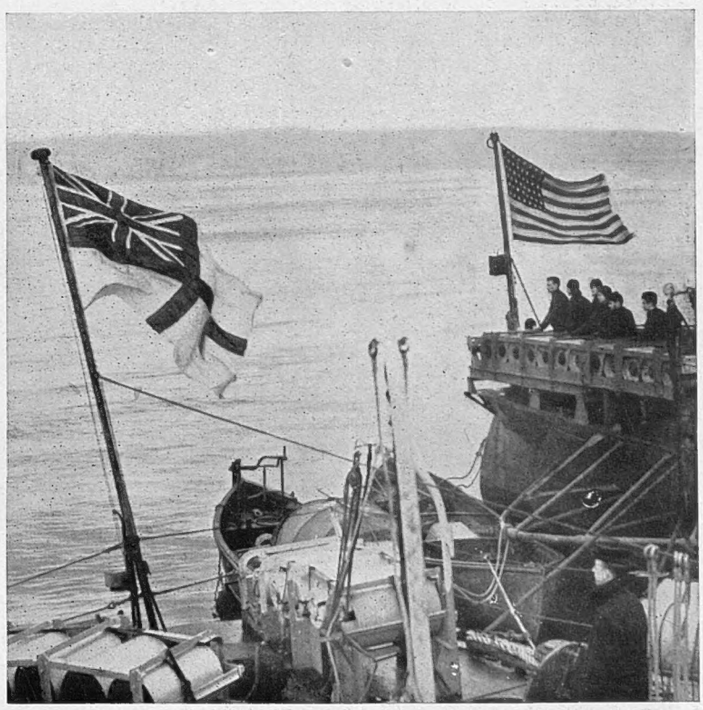
FOUR NEWS PICTURES OF THE WEEK

JUST AFTER THE VOTE OF CONFIDENCE (476 to 25): The Prime Minister and his daughter back at No. 10, Downing Street from the House of Commons. Sergeant Mary Churchill of the A.T.S. had received seven days leave, which covered her father's return from the U.S. and the debate in Parliament

THE KING AND QUEEN WITH THE DEAN OF WESTMINSTER at the Canadian Commemoration Service. Many distinguished people were present at the Abbey a few days ago to celebrate the seventy-fifth Anniversary of the Confederation of Canada. Canadian Forces marched through the West End of London to the service, the salute being taken by Mr. Vincent Massey, High Commissioner, and Lieut.-General A. G. McNaughton, G.O.C.-in-C.

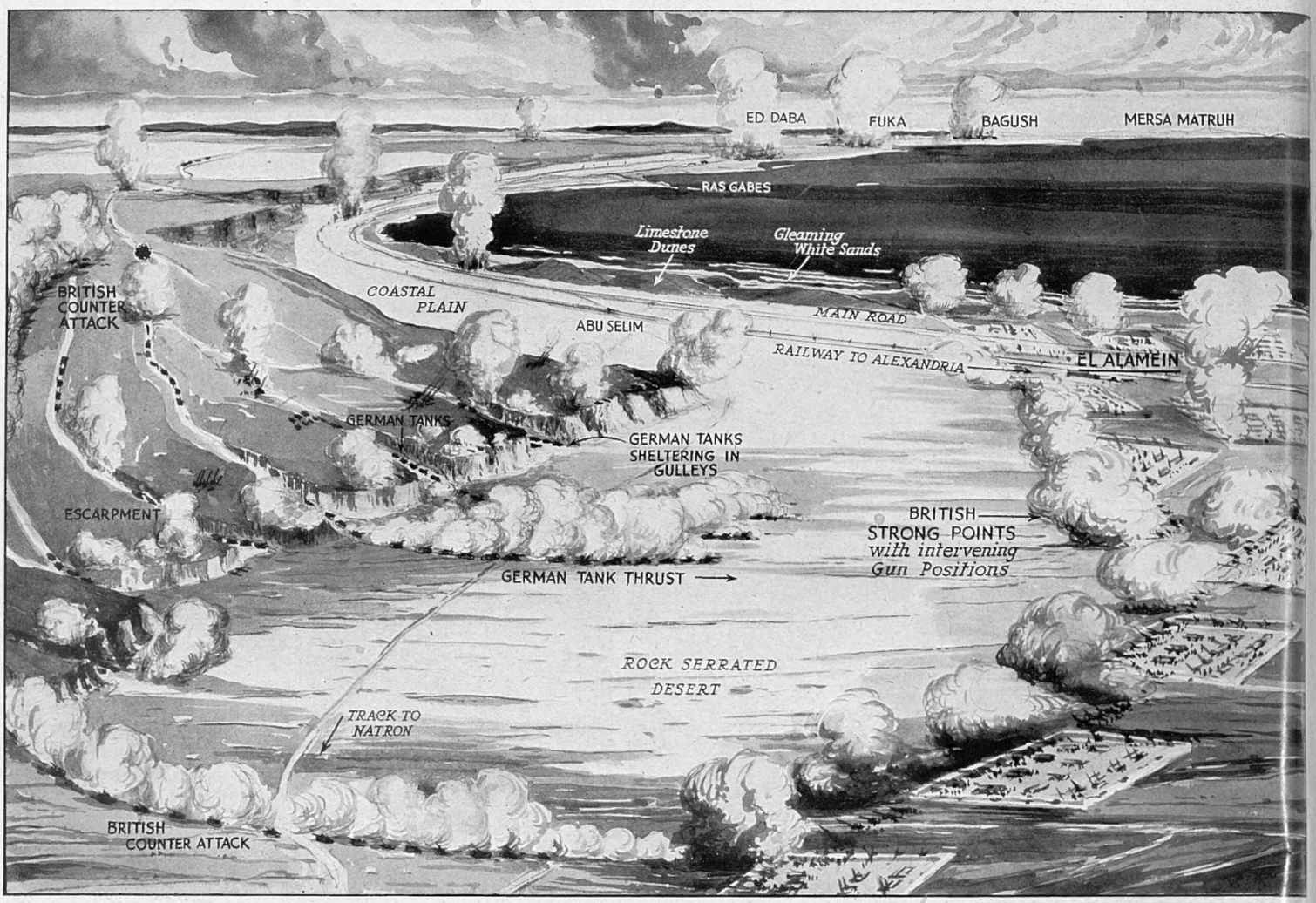


CAPTURED IN LIBYA AND EN ROUTE FOR CANADA: Germans of a Panzer Division leaving a Middle East port by one of the boats which carry prisoners to various destinations in the Dominions, where they will be detained for the duration



A BIG U.S. NAVAL BASE IN ULSTER, built by American and British workers in six months. The White Ensign and Old Glory fly side by side: Londonderry is now America's premier naval base in Europe. Nearly 800 American technicians, with over 2,000 local workers, built it in six months; all the equipment, down to the last nut and bolt, came from the U.S.A. American and British sailors warmly fraternised during the construction work. The base includes receiving and broadcasting stations, a 200-bed hospital, and large camps

THE BATTLEGROUND OF EL ALAMEIN, Where the 8th Army Held Rommel's Forces



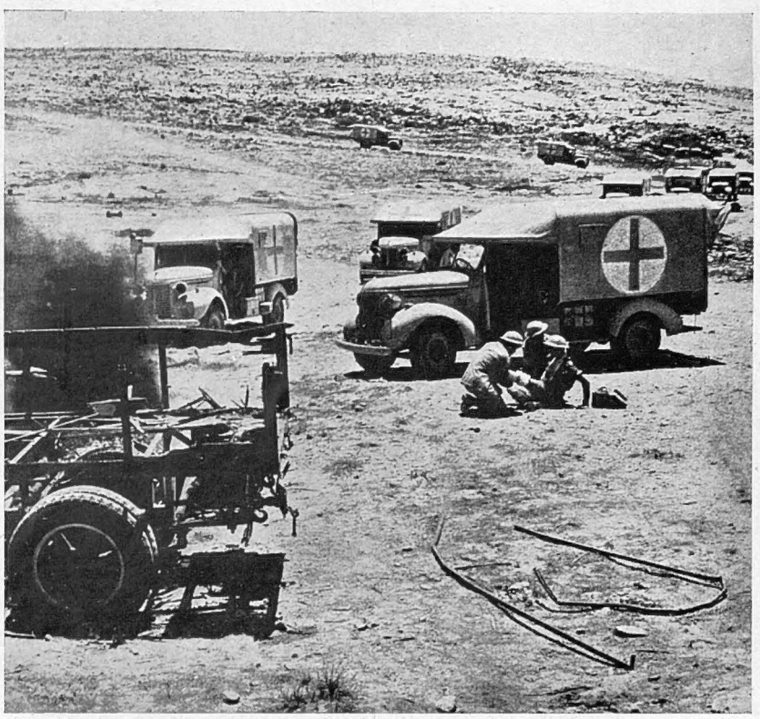
WHERE GENERAL AUCHINLECK STOOD AND CHECKED THE EASTWARD RUSH OF THE AXIS TOWARDS ALEXANDRIA: The "bottleneck" at the eastward end of the Qattara Depression, showing the coastal plain in the north and the German-held escarpment to the west. It was here that Auchinleck launched his counter-attacks and fought back the thrusts by the German tank forces—*Drawing by Percy Home*

The opening days of July were full of fate for the Allied forces in Northern Africa. On the first day of the month General Auchinleck met the armoured assault of General Rommel's forces on a terrain which was almost generally unknown throughout Britain. This particular patch of country is not described in the guide-books, although some 30 miles south two famous physical features, the Qattara Depression and the Wadi Natron, are well known to geologists.

The northern edge of the new fighting area is bordered by the gleaming white sands which run for miles westward along this coast. Immediately inland rises a slightly elevated coastal plain which is separated from the sea on its northern edge by a rim of limestone dunes. Along this plain run, in close conjunction, the main road and railway to Mersa Matruh. There are one or two patches of fertile ground here and there, cultivated by Arab farmers. The soil of the coastal plain mainly consists of a tough clay. South of the plain the land rises to a higher and much more desert-like type of country. It stretches south to the cliffs of the famous Depression.

It was on one of the escarpment edges of this higher desert land that General Rommel fixed his battle positions when he met the resistance of the British defensive lines which stretched from El Alamein (a station on the railway line) southwards towards the great Depression.

A number of gullies break the edge of the German-occupied escarpment and in these General Rommel had been secreting his tanks. From this natural protection the enemy armoured forces, on occasion, attempted to beat their way through the British line. The latter consists of a number of strong points arranged in depth and linked together by artillery positions. The main concentrations of both attack and defence appear to be towards the seaward end of the line. In the above diagrammatic view of the battle area the German tank thrust is shown crossing the battle zone towards the east, while in the immediate foreground one of General Auchinleck's flying columns is seen making a flanking attack upon his rear.



R.A.M.C. PERSONNEL ARE THE UNSUNG HEROES OF MANY BATTLEFIELDS. In Libya even ambulances displaying large Red Crosses have not been immune from enemy air attack. The R.A.M.C. convoy *on the left* was attacked in this manner, and one ambulance was set on fire: the driver, though wounded, got away from his blazing vehicle and was treated by his comrades on the spot. The picture *on the right* shows casualties receiving attention at a Field Dressing Station

THE CREW OF A "GENERAL GRANT" LOAD UP THEIR TANK WITH FRESH AMMUNITION DURING A LULL IN THE FIGHTING. The big 75-mm. gun protrudes from the forward end; above it is the smaller 37-mm. This sturdy fighting vehicle weighs 28 tons and has done very good work in the desert fighting

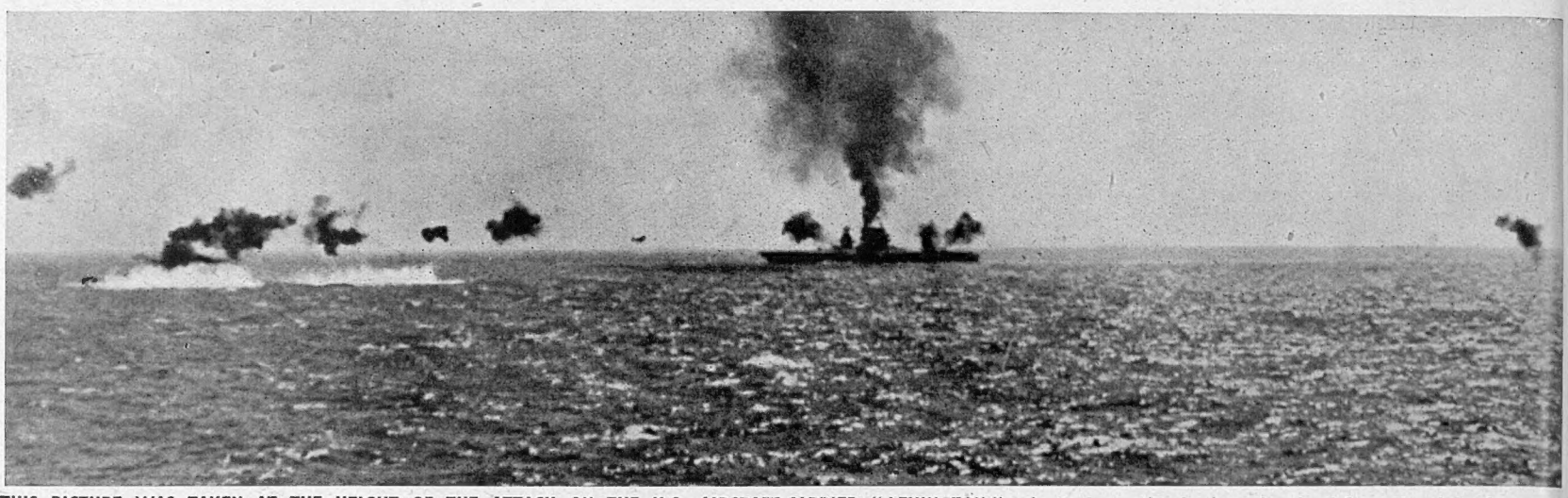
LOADING FRESH SUPPLIES OF MACHINE-GUN AMMUNITION into a British tank during the "Battle of Egypt"

A NEW TYPE OF ENEMY MOTOR-CYCLE CAPTURED IN LIBYA: The cycle has a box-like carrier behind, which may be used to carry a few men into action. It is also capable of towing a small gun up to the forward positions

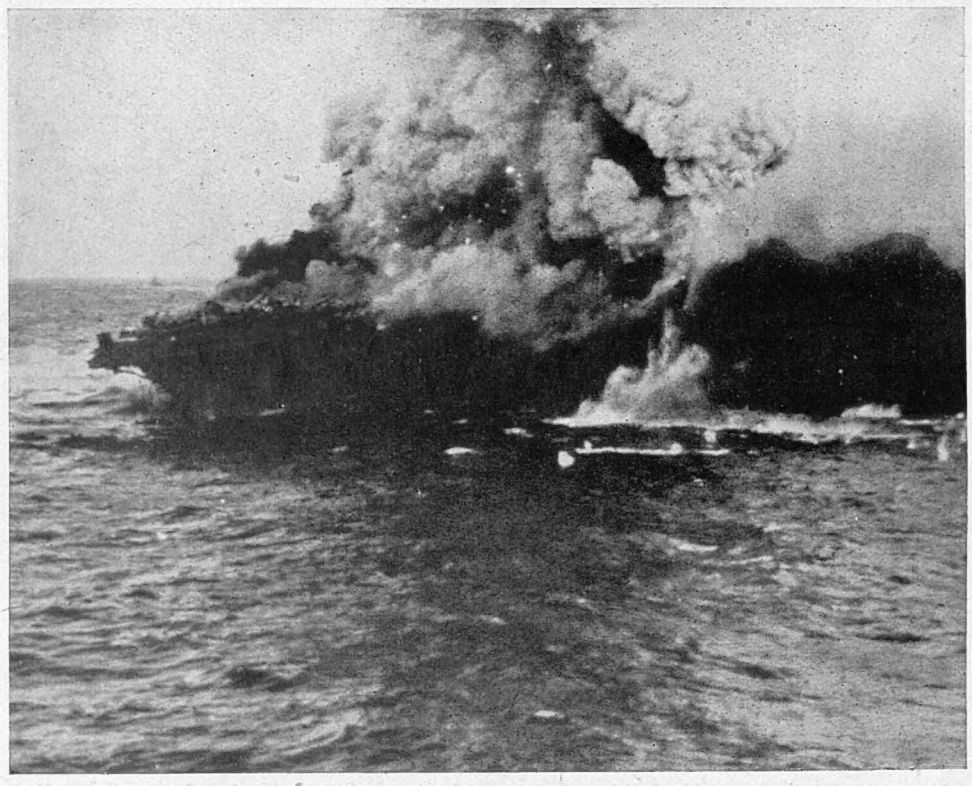
A CLOSE-UP OF THE TURRET OF A GERMAN MARK IV TANK disabled in combat with a British "General Grant"

A BRITISH TRANSPORT, CARRYING SUPPLIES TO THE 8TH ARMY, UNDER HEAVY AIR BOMBING: A big one has just dropped close to the transport track as the British convoy pushes on. The soldier at the left is crouching low to avoid flying rocks and splinters

THE NAVAL BATTLES of the CORAL SEA and MIDWAY ISLAND



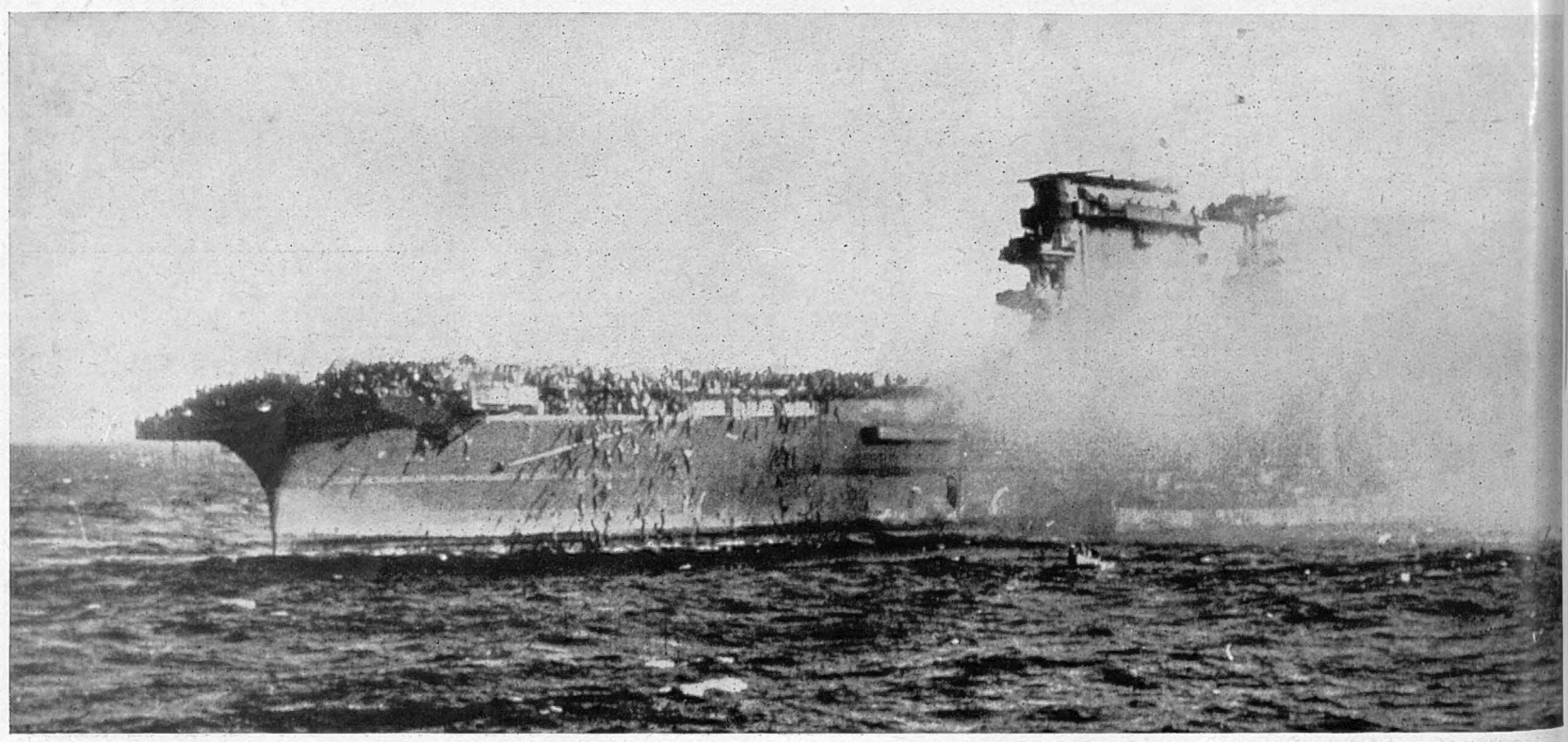
THIS PICTURE WAS TAKEN AT THE HEIGHT OF THE ATTACK ON THE U.S. AIRCRAFT-CARRIER "LEXINGTON": Just above the horizon in the left centre is a Japanese torpedo-aircraft "hedge-hopping" over the anti-aircraft bursts as it closes in. The white spray in the left foreground was whipped up by the A.-A. shells; the black puff at the right indicates that another Japanese plane was also coming in from that direction



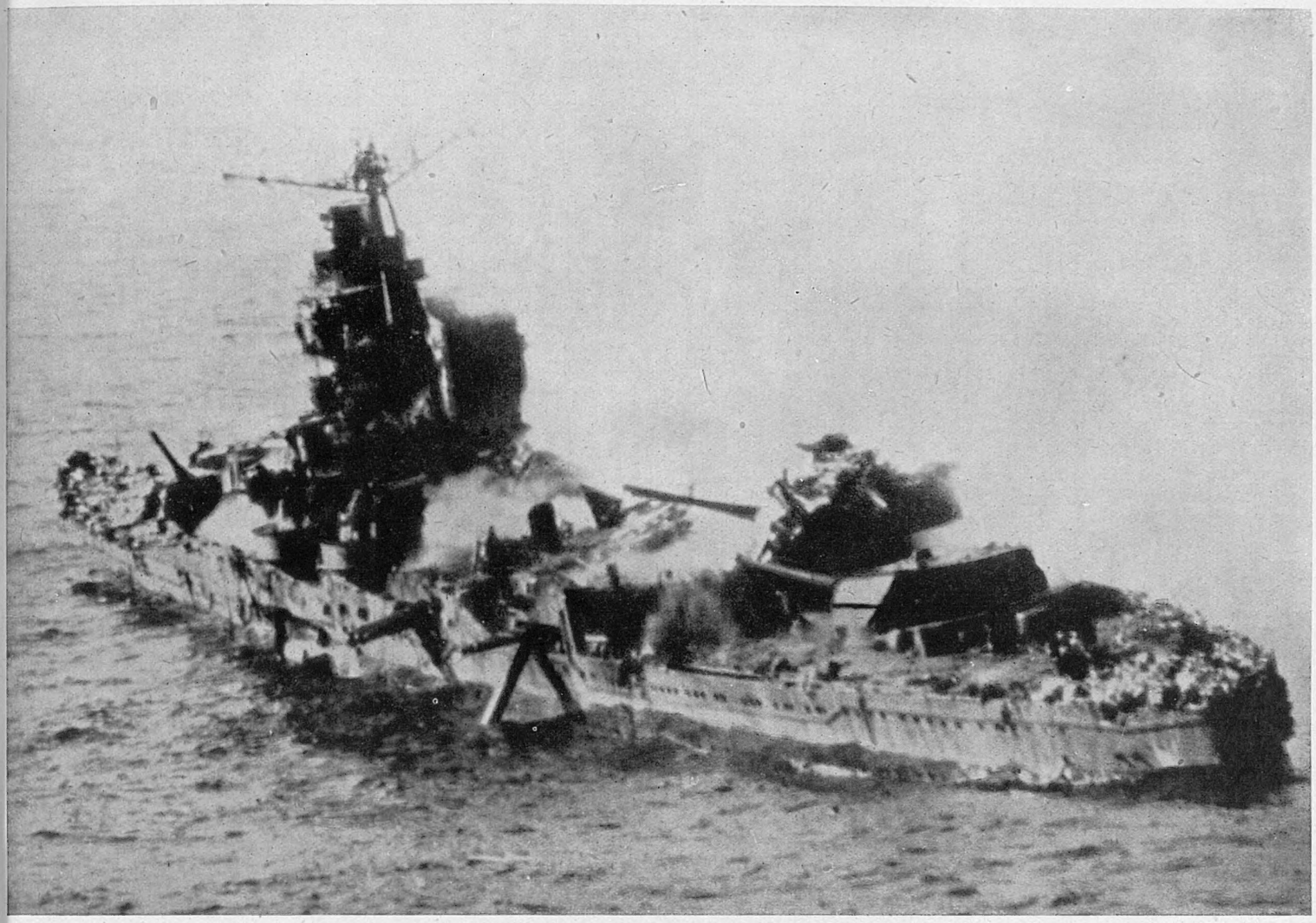
A SPECTACULAR PICTURE, MADE FROM A NEARBY AMERICAN WARSHIP, which shows the actual explosion which caused the sinking of the "Lexington" in the Coral Sea. Smoke and flame are spouting from the Carrier and debris is falling all around

BEFORE SHE WAS LOST: Sailors aboard the "Lexington" examine the damage caused by a glancing blow from a Jap bomb. A number of gunners were killed near the 5-inch gun in the foreground, while another 5-inch gun (in background, marked by the blackened stump of the gun) was completely wiped out with its crew

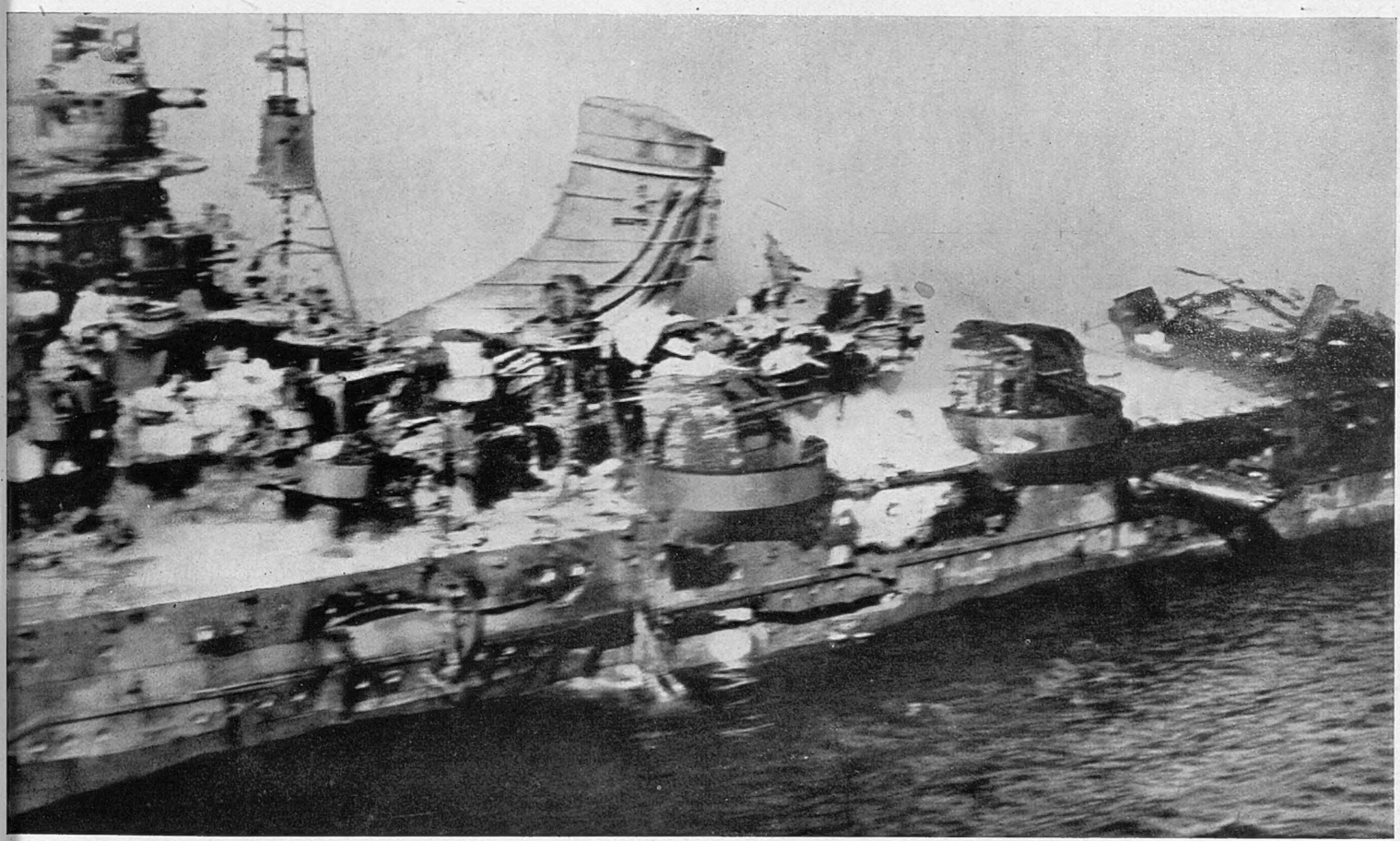
During the period May 4-8, the greatest naval battle since Jutland was fought in the Solomon Islands area, off the Australian coast, between U.S. and Australian naval forces and the Japanese fleet. On May 7, the U.S. Navy announced that the Allied Fleet had sunk a Jap light cruiser, 2 destroyers, 4 gunboats, and a supply vessel; badly damaged other vessels, and shot down 6 aircraft. The following day, General MacArthur announced the continuation of the battle, and further losses to the Japs of an aircraft-carrier and a heavy cruiser, and severe damage to another aircraft-carrier and another heavy cruiser. Further damage was inflicted still later, before the enemy's naval forces withdrew. Unfortunately, the Americans suffered the loss of their aircraft-carrier *Lexington*, an eighteen-year-old vessel of 33,000 tons. She was attacked by Japanese aircraft and exploded; more than 2,000 of her complement were rescued, however. U.S. losses in the Coral Sea battle were the *Lexington*, and the destroyer *Sims* and Navy tanker *Neosho*. The Japs lost 37 ships sunk or damaged



A MOST DRAMATIC MOMENT AS THE "LEXINGTON" EXPLODED IN THE CORAL SEA: The crew of the aircraft-carrier swarming down ropes from the flight-deck after it had been set on fire by Jap bombs; the great explosion which followed is believed to have been caused by the blowing-up of the petrol tanks. Almost lost in the smoke is a U.S. destroyer sent to help fight the fires and to pick up survivors. More than 2,000 of the "Lexington's" crew were rescued



A JAP CRUISER OF THE MOGAMI CLASS (8,500 TONS) AFTER IT HAD BEEN HIT BY U.S. BOMBS IN THE MIDWAY ISLAND BATTLE : It is in sinking condition, and smoke from it is beginning to fill the sky. Note the Japanese seamen crowding the stern of the vessel in an effort to escape. In all, in this battle, the Japs suffered to the extent of seventeen ships sunk or damaged



FLYING DANGEROUSLY CLOSE WHILE THE MIDWAY BATTLE WAS IN PROGRESS, a U.S. Navy airman got this spectacular view of the Mogami class cruiser after it had been demolished by aerial bombs. Armour-plate, steel decks and superstructure are a tangled mass of wreckage

On June 7—one month after the Coral Sea battle—Admiral Nimitz announced that a powerful Japanese fleet had suffered a crushing defeat at the hands of the U.S. Pacific Fleet at Midway Island (1,300 miles to the north-west of Hawaii). The object of the enemy was to capture the naval and air base, but they were soon in full retreat. The Japanese losses were two or three aircraft-carriers sunk (with nearly all their aircraft lost), 3 battleships damaged (at least one badly), 4 cruisers damaged, and 2 transports damaged. American losses were very light—an aircraft-carrier had been hit and some of its planes lost, and a U.S. destroyer was sunk

THEY GO TO MONTE CARLO NOW TO EAT

The Once Luxury City of France is Now the Headquarters of the Black Marketeer. Conditions in this Paradise of Pre-war Days—the Food Shortage, the Gambling, the Purges of "Undesirables"—are Here Described from First-hand Reports

By FERDINAND TUOHY

NEWS from Monte Carlo. Is it on the indecent side to give it prominence at this juncture? Maybe so. And yet this place was such a lure to three generations of British—from the day Blanc the First brought the iron horse to tiny Monaco in 1868 to the summer season cabarets on rafts of the late 1930's—that there is some justification in telling of it in its latest metamorphosis of New Order sandwich still pretending to its independent self.

The Monégasques, who at the last census numbered 1,760 out of the total population of 24,000, lost some of their independence during the last war when President Poincaré put over a swift one which gave police, Customs and currency control to France. What more they risk losing from the present earthquake may be surmised from the news that the Germans have just guaranteed Prince Louis the integrity of his territory and the maintenance of his dynasty. This in return for authority to build a broadcasting station, which also necessitates Germans being introduced into the local Italian telegraph and telephone systems.

Germans have ever filled their lungs and eyes with Monte Carlo. *Wunderbar! Wunderschoen! Und was für Ausfluege! Und was für Butterbrötchen* on the Terrace!

Well, there they are now in force, though they 're not eating sandwiches on the Terrace, but running the Black Market, or profiting by this.

As Monte Carlo became known in the other war as a recuperative centre for casualties or as a gentle last setting for the worst of these—it was then that Zaharoff snapped up what looked to be a moribund concern, the Casino—this time the Principality has gained notoriety as a place where one goes to eat, if one has the price, amid a surrounding countryside of hunger. The Principality is unproductive save for a tiny spot of wine, fruit, vegetables and fish, but that is easily remedied these lovely times. What happens is quite simple. Vichy France has to send endless trainloads of food of all kinds, and wine, from Marseilles along into Italy, where black marketeers take pickings which they send by boat back to Monaco. All this traffic, both the trains and the boats, is an affair of the night.

Yet the astronomic cost of most of the merchandise puts it beyond the reach of the great majority of Monte Carlo's inhabitants. It is necessary to appreciate this, or one would give a false picture of locals siesta-ing with full tummies. No such thing. Monte Carlo is leading a double life.

Those who haven't got money to discard are having a thin time. Not as thin as next door at "Vichy" Nice, but sufficiently thin to warrant many local children being transferred to Switzerland so that they may be adequately nourished. Here is the situation this spring for an English resident drawing the monthly £10 allowance through the Foreign Office:

"Our food supplies continue to be very scarce, although we are getting more fresh vegetables, but our great trouble is to get sufficient bread, because our bread tickets are exacted for so many other things than bread itself, particularly for *pâtés*, which is a staple food here, and considering that I am only allowed 200 grammes daily (old-age category), the result is that my tickets only last for about half of the month, and then I have to barter with cigarettes. Moreover, the population is being prepared for a reduction of the already short bread allowance. And only four litres of wine a month. No wonder that I am always cold. It is always with much pleasure that I see Saturdays come round, when I go to old Lady Blank and tuck into a good tea with scones, *pâté*, butter and marmalade, the luxuries of the black market. You cannot possibly realise what starvation is like until you 've tried it."

Men suffer more from prolonged hunger than do women, and old people more than young. Why, then, don't the old people return home? There are about 200 British still at Monte Carlo, most of them elderly or infirm. Not only does the British Government offer to advance them their fares home, but the journey via Lisbon can now be relied upon not to take more than three weeks or a month. Why, then, stay and "starve"? The answer is that Axis propaganda tells of an England laid waste by air raids and nearly starving; that wireless reception of English stations is forbidden, jammed or difficult to get; and that, anyway, these "expatriates" refuse to leave their homes and properties for an England they haven't lived in for years. And there 's also the lure of the climate. Elderly or infirm people do not feel practically being chained to the Principality. Local passes out of it are seldom issued, and this would eventually become a severe drag with the more active. But nearly all of these have gone, especially men between eighteen and forty-eight belonging to one or other of the United Nations. The last census showed 1,902 British, 270 Americans, 194 Belgians, 164 Dutch and 132 Russians, together with samples comprising almost every other nationality under the sun. The local police, operating with the Ovra, Gestapo and Laval State Police at their elbows, have been through all with a fine comb. Monte Carlo had a reputation in 1914-18 as a rendezvous spot for secret agents. Nothing like that this time. In particular, the Italians wish no risk to be run of Allied agents lingering around Monte Carlo, where communications are tenuous and easily destroyed. Fascist plans might even be jeopardised for the eventual move westwards from Cap Martin into Nizza la Bella. Sufficient dynamite ignited at likely spots high on the mountain and down by the sea, and clearance and reconstruction could take months.

But this is to wander from Monte Carlo's double life. The 18,000 local Italians and French, overwhelmingly working-class, are only in slightly better case than the £10-a-month "expatriates" in that they can grow more food themselves or wangle it from relatives living in the hills behind. They have also bought up all the local fishing-tackle, although the Mediterranean is poor alike in piscatorial quantity and quality. They have disposed of all the cats which were popular as *civet de lièvre* even in peacetime—a pub I knew near Toulon used to chain their cat to the door, a fine, plump Persian. You doubtless read of Monte Carlo's last cat, Minnie, for which a tidy reward was offered in vain. *Civet.* Dogs taste even worse than cats, and so some remain, being fed on a fish-offal paste. One imagines some pampered pets having to like that. *Poor dears!*

Dumped down in the middle of this chronic hunger is the Black Market, chiefly of food but extending the usual gamut. It is conducted on top by Germans who have installed themselves at the chief hotels. An acquaintance just arrived in London, who had the means to make an occasional descent on Monte Carlo from dead and hungering Cannes, relates that she found at Monte "a sort of no-man's-land of luxury, a haven where one can withdraw for forty-eight hours and forget Europe and the New Order *and eat*. You cannot imagine how one comes to think, dream, talk food eternally when you can't get any. You in England don't know what it is to gaze at shop-windows stocked with food—and to have no more coupons. They needn't have been afraid of us spying. Chasing food occupied our days! At Cannes, the daily staple is carrots, leeks or a German horror the French call *rutabages*. But at Monte . . .

"There are no food restrictions and everything arrives by sea from Italian ports. All the unfindable things are to be had at the bar of the Hotel de Paris, whose barman knows the police can do nothing in his territory. Real silk stockings at 200 and 250 francs the pair; Balto cigarettes at 150 francs the packet of twenty; whisky at 700 francs a bottle; chocolate at 500 francs a lb. The £ is still officially quoted as 177 francs. One needs many pounds for the quietest week-end at the Hotel de Paris, where one stays principally because it is one of the only two hotels in Unoccupied France—I include Monaco for the illustration—where one can have a hot bath. But it must be before 10 a.m. The other hotel is the Majestic at Vichy.

"As for restaurants, Ernest, Oscar, Quintos, Carcunello and Goashina are going strong and serve admirable meals, including most of the delicacies cooked in the French style. But the cost is stupendous, and this makes one's visits to Monte both brief and ruinous. Nevertheless, the temptation is too strong even for people dead against the Black Market. There comes a moment when they must buy food or else they may as well throw their money in the sea. So they get a pass for Monte Carlo after much fussing and palm-greasing, and then they sit three hours in a packed third-class compartment for the journey of thirty miles. Ah, but all the time they are thinking of that meal ahead! Of the forty-eight hours' release from Vichy France and its terrible boredom and hunger. The unfortunate part, though, is that many people succumb to the Monte Carlo food lure who cannot afford such a thing at all; and they suffer dreadfully from their sortie for the balance of the month.

"Apart from the feeding, life is almost as sinister and inactive at Monte Carlo as elsewhere. The atmosphere is very sad. A few taxis demand prices that Nazis can pay with impunity—they get twenty francs for their mark and the place is full of them on holiday—or else a dozen skeleton horses survive to draw those Victorias which used to skip along. There is no black-out and that is about the brightest thing. Unlike Unoccupied France, a few night places continue in Monte Carlo—the Mayfair, the Tip Top, the Knickerbocker—but dancing is prohibited and one just sits and listens to artists singing nostalgic and saddening numbers. One reason there 's no dancing anywhere is that Hitler forbids it in Germany too. While men die in battle.

"As for the gambling, roulette and even baccara and 'chemi' are still attracting crowded tables. Many of the players are Axis nationals who have francs to burn, but others also stake, actuated perhaps by nervous tension and a feeling of 'Let 's try our luck and get money to visit the Black Market or to stay on another forty-eight hours.' People are loath to leave because they cannot get passes easily to return. The Casino policy is closely to control entries to the Principality, so that there are no hangers-on but always a fresh public arriving with money to gamble with."

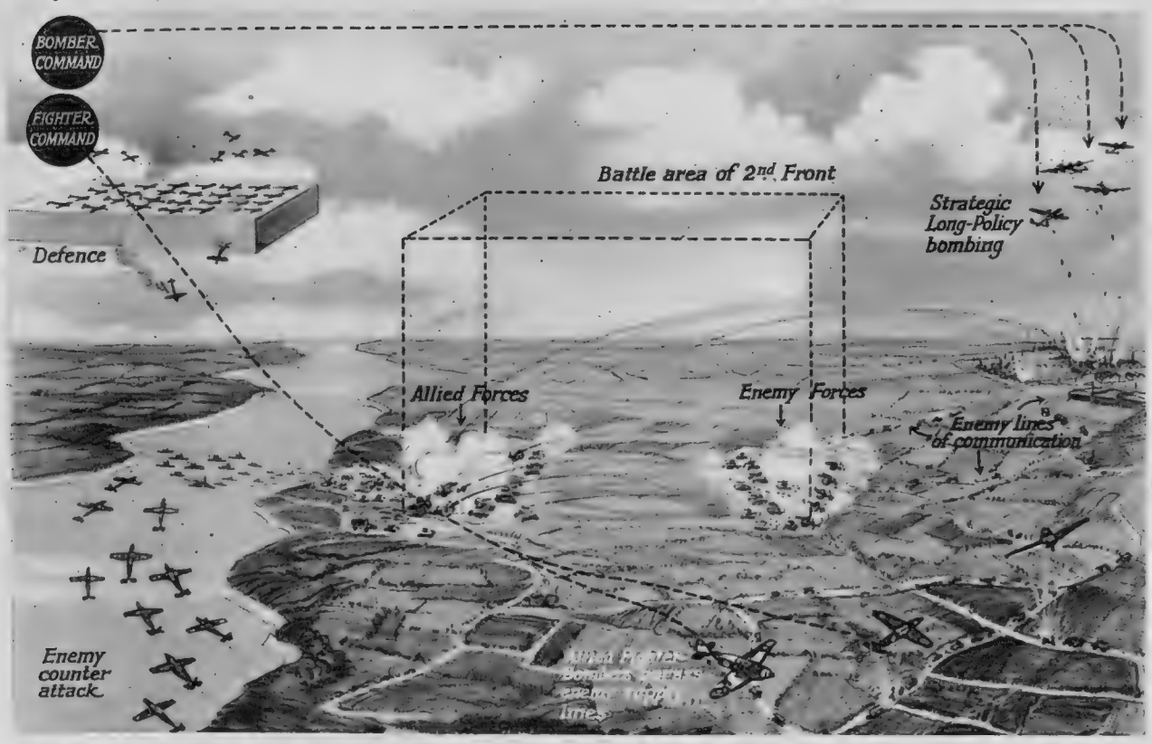
It only remains to be said that Prince Louis, an aged and infirm former French general of Fascist tendencies, has interceded on two occasions with Pétain so that the British old-timers may live out their days in the Principality. However the war ends, there is no particular reason why he shouldn't one day be succeeded by young grandson Rainier, and the dynasty go on whatever the new order; but in that event the Casino will witness gambling of a more "popular" brand.

THE FRENCH ADMIRAL AT ALEXANDRIA: The loneliest Admiral—and one of the loneliest men in all the navies of the world—is Vice-Admiral Rene Emile Godefroy, the commander of the nine French men-of-war immobilised in Alexandria since the Fall of France in June 1940. He has faithfully complied with the agreement made with us not to attempt to leave the Mediterranean naval base. Speculation has again arisen concerning the ultimate fate of this fleet, owing to Rommel's advance through Egypt

WHEN WE LAUNCH OUR EUROPEAN INVASION

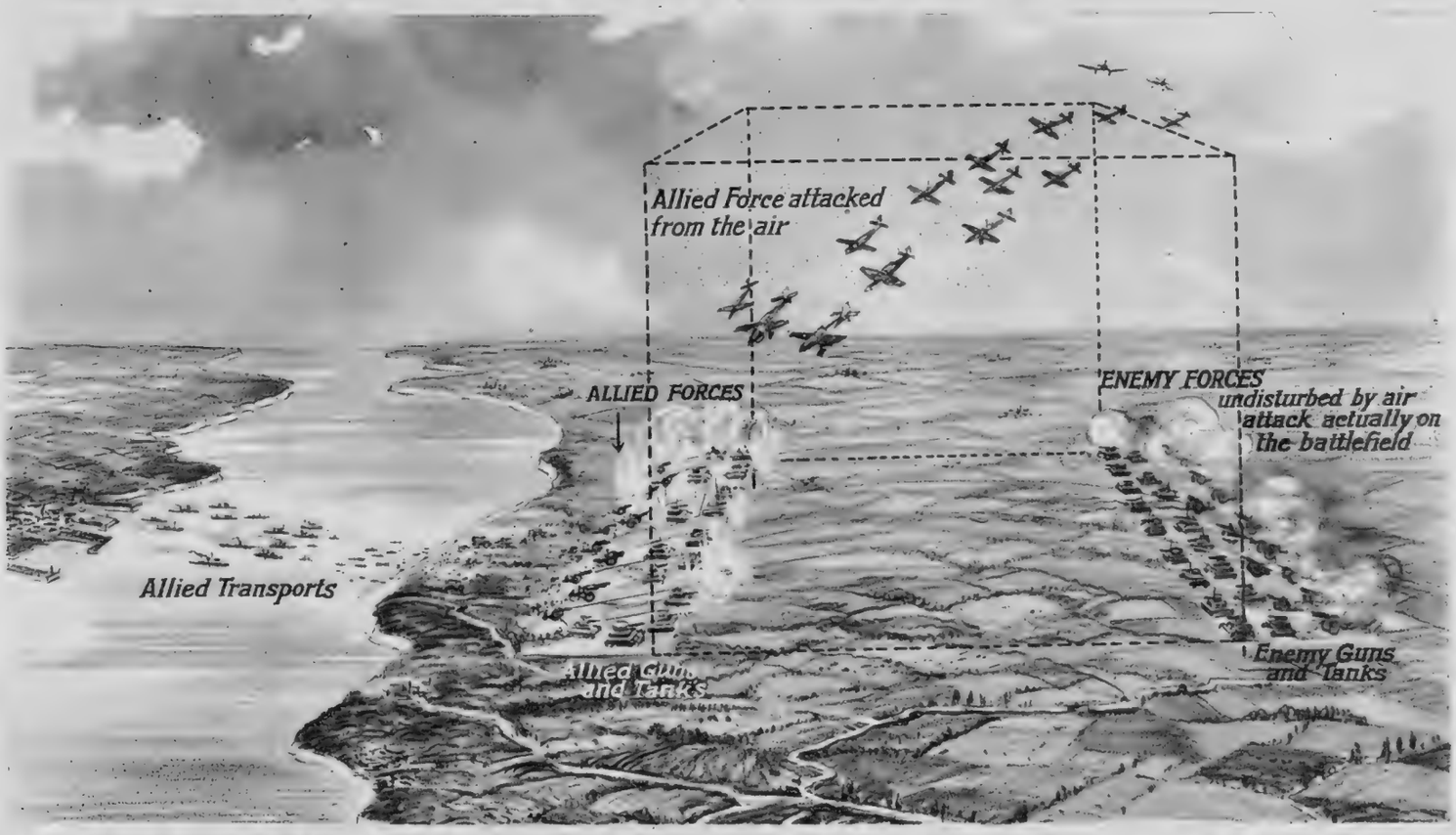
Protection for the Infantry Against Prolonged Dive-bombing will be Essential. That is One of the Lessons of the Recent Libyan Fighting

—Special Sphere Diagrams

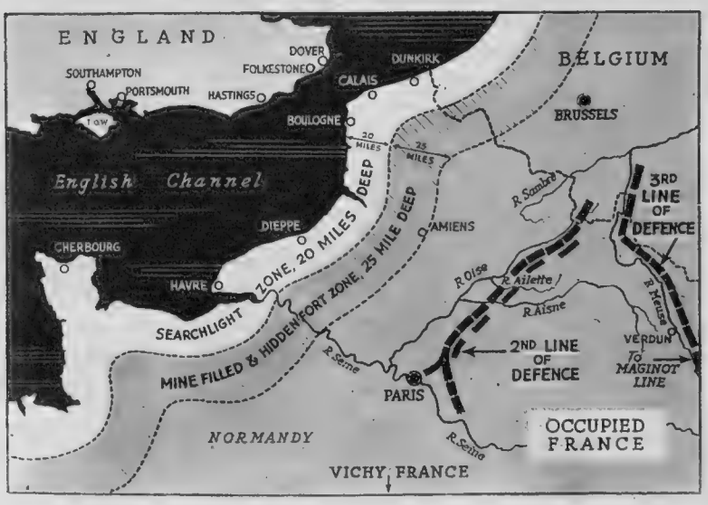


IF AND WHEN A SECOND FRONT IS OPENED IN EUROPE: The functions of Bomber and Fighter Commands when the battle is joined: the former would pursue a long-policy strategic role, whilst the latter would be engaged on the more immediate task of harassing the enemy and his lines of communication, as well as watching over the "Invasion" Fleet

RECENT months have seen a good deal of speculation concerning the "Second Front" which the Allied Nations are to open against the Axis. But the term "second front" is an obvious misnomer: Britain already *has* a "second front" in Libya (if nowhere else). It is likely that what is meant by the majority is a "European Front," with the express object of relieving pressure on Russia.



A BRITISH ARMY IN EUROPE WOULD CERTAINLY BE SUBJECTED TO NEVER-CEASING DIVE-BOMBING ATTACK, in addition to tank and artillery assault. Despite our possession of a strong fighter force, the dive-bombers would undoubtedly wreak great havoc amongst our infantry, as they did in Malaya and in Libya



The three diagrams reproduced on this page have been designed to show just one aspect of the situation—the danger of launching a European "Invasion" without an effective counter to the dive-bomber. Germany is known to be enormously strong in this type of aircraft: and we have seen—in Malaya and in Libya—what havoc can be wrought by this arm. It is generally conceded that no Invasion Fleet could live without a defending air "umbrella"; but, once the Army has been landed on Occupied Territory, it would be necessary to ensure that the infantry, artillery and tanks moving against the enemy have the means of countering the activities of the Stukas which have proved so disastrous elsewhere.

***On left*—THE PROTECTED AREAS OF NORTHERN FRANCE, which our troops would have to penetrate when creating a "Second Front" in Europe**

Fighter Command and Bomber Command would both co-operate, of course. But whereas the latter would be operating a long-term policy of strategic bombing far behind the enemy's lines, it would be the duty of the fighters to hold the air over our fighting men and to beat off attempts to dive-bomb our positions. How this is to be done is not, at the moment, apparent: because, despite air supremacy in Libya, our fighters were apparently unable to hold off the Stuka!

"If and when the time comes for it [the Army] to invade the Continent, it will rightly expect the most complete fighter 'umbrella' against air attack that Fighter Command can give it." This statement comes from a recent Air Ministry Bulletin. It is an indication of the Air Ministry's awareness of the needs of the moment. It is *not* a statement that the Army can be provided *effectively* with such an "umbrella" at all moments!

AN ATTACK BY DIVE-BOMBERS IN LIBYA: Stukas making an assault on fortified positions of the Free French at Bir Hacheim at night and by the light of flares. Dive-bombing was very heavy during the later stages of the attacks on this Allied strongpoint, and the assault was carried on by day and by night—*Drawing by Roland Davies*

On left—**A PILLAR OF FIRE IN THE DESERT: A direct hit by a British bomb on a German Panzer Division tank**

WHAT IS "AIR SUPERIORITY"?

Did we Have it in Libya; and Did we Use it Correctly?

By PATRICK HAMILTON

IF the last Libyan campaign is looked at as consisting of two separate phases—prior to the fall of Bir Hacheim and afterwards—several rather puzzling features become a little clearer. Particularly does this apply to the "air superiority" question. Many are asking if we ever in fact had it, and if we did, why did it fail us in our hour of need? Probably, the true answer is that we did in fact have air superiority up to the fall of Bir Hacheim.

While this place was held by the Free French, our planes could operate from advanced landing grounds, and deal with telling effect with the enemy's supply columns and infantry. But when Rommel brought up his heavy coastal guns and forced General Koenig to withdraw, and particularly when we lost so many of our tanks in a night ambush, the whole tempo of the battle accelerated. The advance operating grounds became liable to seizure by the enemy's armoured vehicles, so they could no longer be regarded as safe receptacles for valuable planes and crews. A process of withdrawal had therefore to be put in operation, and Rommel seized his opportunity to press on and make the most of the time when, the Empire squadrons being in process of regrouping themselves behind the frontier, his own planes could operate without serious hindrance against our field armies.

The vigour of the German attack, it now seems clear, was such that, once our withdrawal had begun, we never again had time to establish ourselves. We have learnt that "control of the sea" is a qualified phrase, and it seems that "air superiority" is similarly no magic password to victory. One may define it as strength sufficient to make our will prevail in any section of the air in which we choose to exert it. But if we exert that strength in the wrong place or for the wrong purpose, it is superiority wasted. And, in the case of dive-bombers particularly, it is not always possible to have fighter aircraft all along the front ready to repel attacks on the infantry.

Libya was a tank campaign, and a heavy-tank campaign. Whatever the truth as to the relative air strengths of the antagonists, there seems little doubt that we were much weaker both in tanks and artillery; and these were the decisive weapons of the day. In the desert, ordinary bombs are not particularly effective against tanks, for direct hits are rare.

Although much has been written of "tank-busting" aircraft, it is obvious that a vehicle which has, *prima facie*, to stand up to attacks from others of its kind, and from field artillery, is not likely to be an easy victim for any gun which can feasibly be mounted in an aircraft. It is possible that the Russian rocket-bomb would have worked better, but we have not got it and there is little point in vain conjecture.

The R.A.F. concentrated its efforts, probably wisely, on preventing Rommel's supplies getting through. There is every evidence that they did tremendous destruction here, and that for the early days of the battle they really had Rommel in a quandary. But that bold and skilful general was fully conscious of his predicament—there was no point in husbanding his resources in battle to have them strangled by air attacks in the rear. He accordingly threw the last ounces of his strength at the obstacles which barred the passage of his armoured vehicles to our landing grounds. As Knightsbridge and Bir Hacheim, and later Gazala, fell, our fighters found themselves in much the position as the pilots of Fleet Air Arm machines do when their carrier is sunk. Their bases were lost, and with them went our ability to hold the air over the battle-zones. Thus our infantry were called on to sustain attack after attack from above, as well as from the land.

It was then that Rommel's planes came into their own, and our unfortunate troops were compelled to accept land and air attack concurrently on the heaviest scale. We read of dive-bombers playing a major part in reducing Bir Hacheim—some say that up to 300 Stukas were used in a single attack. At times our fighters made them pay for it, but there seem to have been hours when they were free to work their will.

At Tobruk, there is no doubt that the bombers played a vital part, both by night and day. The attacks were planned with typical thoroughness. Successive gun positions were made the targets of concentrated attacks until they were silenced; then the attacking Stukas tackled the battery next in line, gun by gun, until a road had been cleared into the heart of the town. Even by night, the attack proceeded by the light of flares, and it was this which prevented the evacuation of the garrison by sea when the end was in sight.

GERMAN STUKA DIVE-BOMBERS being loaded up with bombs on a Libyan air-field. All the details of the hill in the background have been obliterated and painted over by the German censors: gun posts were probably located here

The moral effect of such endless attack on the defenders is undeniably great. It was the same in Malaya and the Dutch East Indies, and one well remembers how bitterly the men complained of never seeing a friendly aircraft in the sky. There is little doubt that, in the long view, the best place for one's air support is away behind the enemy lines, starving him of arms, food and fuel. But there is equally little doubt that from the morale-sustaining viewpoint, it is very hard to make this clear to the front-line soldier, who looks to his own air force for direct and immediate cover. It may be that we were wrong in applying the bulk of our air-strength on a plan that was strategically correct, but psychologically harmful. Possibly better results would have followed if more machines had been spared for use in the zones of immediate fighting. Innumerable speculations could be made, but the dust of the desert still shrouds most of the real facts of the struggle. Among the few facts that emerge is the certainty that both our land and air forces fought with as great a tenacity of purpose as any men have ever shown.

Another fact which is indisputable is that, when we speak of "air superiority" we mean virtually nothing, in terms of military strength, if we mean only a greater strength than the enemy *in the air*. The aeroplane is heavily tied to the ground, and if its base is unsafe, or threatened by superior land forces, it must in the end retire. "The bomber will always get through"—for it is almost impossible to visualise, as between ourselves and the Axis, so great a superiority that the enemy will never dare risk his machines in attack. Where the prize is worth it—and in Rommel's case the prize was the road to our aerodromes—a determined enemy will always be able to make attacks of the heaviest scale on limited objectives. If the air superiority is not then backed up by men and artillery on the same scale, any single break-through may turn the tables on the whole situation. This is more than ever true when dealing with a soldier like Rommel, in whom there is a strong streak of the gambler.

It is hard to persuade even the most seasoned troops to take the same view of air attack as the General Staff. The damage done by Stukas may be slight in terms of men killed and guns destroyed, but it is the worst possible hindrance to troops already engaged with an aggressive enemy on the ground. Rommel appears hardly to have worried about our supply columns at all, and he organised his on such a prodigal scale that enough got through to serve his purpose. Probably we might, in time, have changed our tactics to the same plan, and possibly it would have paid us equally well. But as it was, when our front line men most needed them, our planes were miles in Rommel's rear. By the time they could be recalled and refuelled, the position which they were needed to defend was often taken, and the destruction of supplies intended for use on the day after next availed us not.

A STUKA DIVE-BOMBER ATTACK ON THE DEFENCES OF SEBASTOPOL. Attacks on this heroic Russian fortress were always preceded by heavy bombing attacks. This scene is taken from the northern fortifications looking across the Harbour to the city itself. The Russian defenders consistently refused to be overawed by the dive-bombers and hit back with all they had right up to the last moment—*Drawing by Roland Davies*

ON THE NIGHT OF JUNE 25 . . .

IN THE "BRIEFING ROOM" at a Station of Bomber Command, as the crews received instructions before leaving for the 1,000-Raid on Bremen on the night of June 25

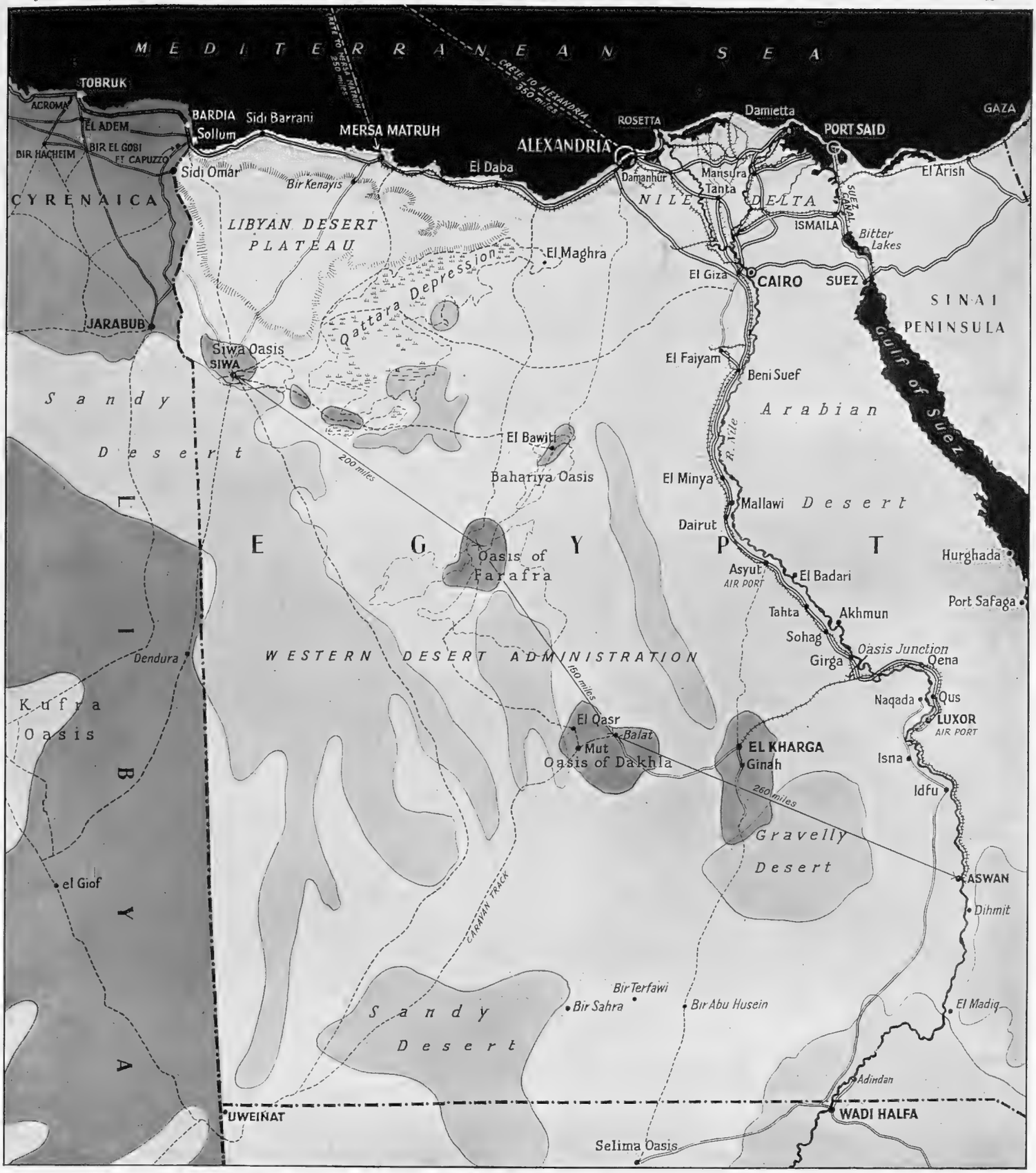
TWO OF THE BOMBER CREWS WHO TOOK PART: A Sergeant Pilot and an Officer-Air-Gunner: the latter, it will be observed, has already been awarded the D.F.C.

AFTER THE 1,000-RAID: "This is where we got to. . . ." A member of one of the crews "pinpoints" his report. Two of these three officers have received the D.F.C.

AN UNUSUAL ATTITUDE adopted by one of the sergeants who took part in the Bremen raid, when making his report after his return

NIGHT-FIGHTER PILOTS AT BREAKFAST THE "MORNING AFTER": The Flight Commander, who had been out the previous night combating enemy nuisance raiders, gives instructions to the ground crews concerning the servicing of the Beaufighters which had been in action a few hours previously

THE WORK OF THE WOMEN: A radio operator of the W.A.A.F. keeping in touch with the crews during the very heavy raid on Bremen on June 25—the third of the big R.A.F. "four-figure" raids on Germany



THE VAST DESERT AREAS WHICH LIE TO THE SOUTH OF THE COASTAL BELT OF THE LIBYAN DESERT: Here a few oases provide widely separated stepping-stones towards the Nile from the north-west; but they are separated by huge tracts of waterless desert

The BATTLE for EGYPT

The Huge New Areas which Confronted Rommel in his Advance Towards the Nile Basin

—A special Sphere Section, with diagrams and drawings of the new Battle Zones

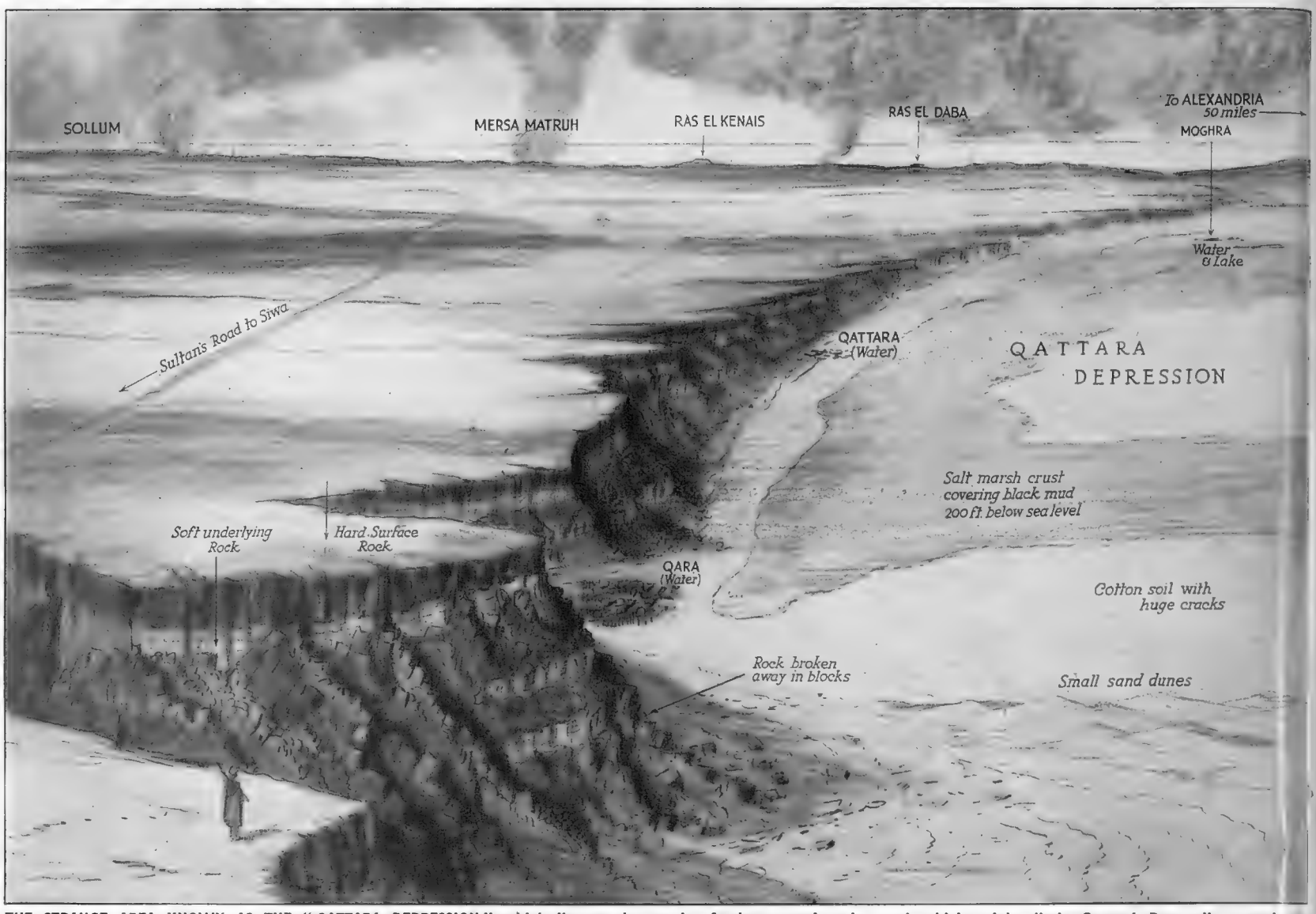
FOLLOWING on the fall of Tobruk on Sunday, June 21, Marshal Rommel's forces at once began their advance towards Mersa Matruh (which was abandoned by the 8th Army) and farther east. The Battle for Egypt had begun! But, so far, the invaders have been concentrating their principal forces along the coastal strip between the Mediterranean and the Qattara Depression, with the evident intention of striking at Alexandria and the Nile Delta.

Nevertheless, there is a possibility that Rommel may order a thrust southwards: a few days ago, in fact, the Nazi-controlled Paris radio declared that "one Italo-German column is now marching southwards, threatening Bir Fuad and Siwa." The latter is about 170 miles south-west of Mersa Matruh; it is the junction of a number of caravan routes from the Nile Valley to Libya.

Whether such an astute commander as Rommel would go farther than this, however, and plunge into the huge desert areas of Egypt, is doubted by Englishmen with a deep knowledge of the regions he would then have to traverse. "I do not think there is any possibility of a force of any size at all getting across the desert from Kufra to Khartoum via El Obeid," says Major C. S. Jarvis. "The difficulties of the desert—its lack of water, etc.—make it possible only for a carefully organised exploring party in light cars. I should say it is out of the question for an Expeditionary Force, or anything resembling an Expeditionary Force. What is far more likely is an attack on Khartoum, via Kassala, which is already in Italian hands. Another thing that might possibly be attempted is a light-car raid from Kufra, via the water-hole of Uweinat, to Wadi Halfa or Aswan, to interfere with the dam and with communications. It would be a very daring thing to do—a sort of forlorn hope—for they would not return. And it could be done only by a raiding party in light cars, viz., Ford V8s, or cars of that type, unarmoured and unaccompanied by guns."

Above all else, water is the chief problem. This makes it imperative for any force attempting to cross the great desert spaces to stick to already existing routes. The supplies are necessarily limited here, and the distances involved considerable. At some points the local supplies would be insufficient for large numbers of men and vehicles.

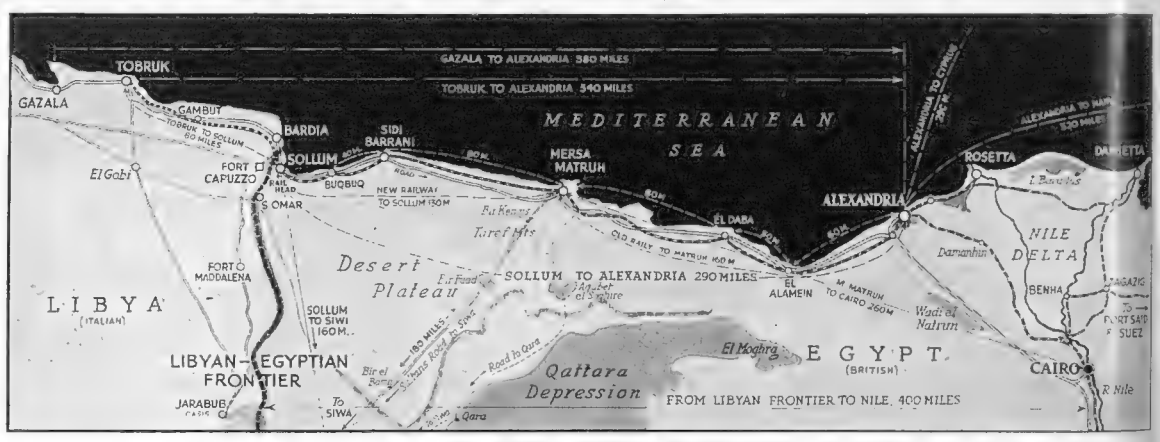
THE BATTLE FOR EGYPT—*(continued)* The Qattara Depression



THE STRANGE AREA KNOWN AS THE "QATTARA DEPRESSION" which lies to the south of the coastal strip, and which might limit General Rommel's capacity to manœuvre in his eastward advance. This view of the Depression is from the south-west in the direction of Siwa; it shows the salt marshes and the strange rock formations on their edges, eroded by the desert winds—*Drawing by Percy Home*

SINCE the fall of Mersa Matruh, mention of the Qattara Depression has become more frequent in the despatches from correspondents in Egypt. As battle was joined in the sandy, characterless coastal plain, and on the rough stony ground of the escarpment far to the south, an interesting situation developed as the enemy thrust eastwards towards a narrowing corridor, where the distance between the Depression and the sea dwindles to a mere 42 miles. "While the depression is not totally impassable," wrote Mr. Christopher Buckley, "there are few narrow causeways across it: no powerful forces could hope to traverse it at any speed. . . . The enemy would, therefore, be forced to undertake a direct frontal attack against this corridor."

The Qattara Depression is a stretch of very low-lying desert extending from the east of



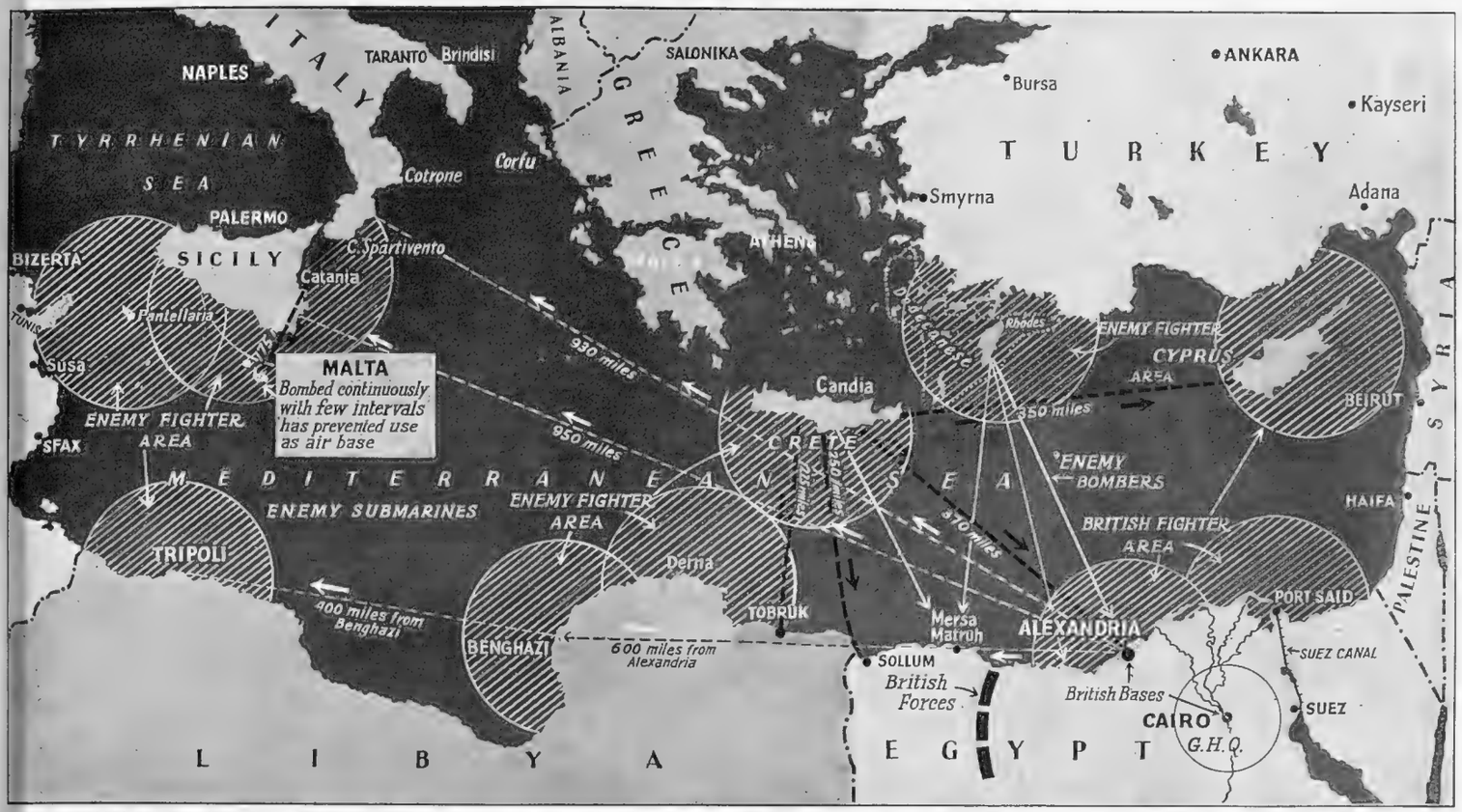
FROM THE EGYPTIAN FRONTIER TO ALEXANDRIA, showing railways, roads and distances, and the alternation of desert and oasis. The Qattara Depression is here seen in its relation to the coastal line

Siwa Oasis to the salt lake of Moghara, roughly 120 miles west of the nearest point in the Nile Valley and on the same latitude as Cairo. The Depression, which is some 150 miles from west to east and 100 miles from north to south, averages about 200 ft. below the sea-level and some 1,000 ft. lower than the surrounding desert. Its northern boundary is 80 miles south of Mersa Matruh, where the gradually-rising plateau of gravel and limestone falls away suddenly in sheer cliffs and escarpments to this vast scoop in the desert's face.

In the Depression itself the surface of the desert varies—much of it is sabakha, or salt marsh, with a crust that will support the lightest patrol vehicles in summer time, but which is never negotiable for lorries or heavier vehicles. Beneath this crust is bottomless black and evil-smelling mud; but these conditions are not general throughout the vast hollow, as in other parts are stretches of hard black cotton soil with alarming cracks in the surface, big areas covered by light drift sand, lines of immature sand-dunes, and the inevitable outcrops of hard limestone in the form of sharp-pointed cones which have resisted the general desiccation caused by desert winds.

Speaking generally, the going in the Depression is of such a nature that it is impossible for the passage of a force of all arms, as the passes leading down to the lower levels are extremely rough and precipitous, and the going at the bottom does not permit of a general movement of a large force from west to east. Winding tracks exist through the difficult

***On left*—ALEXANDRIA AND ITS IMMEDIATE SURROUNDINGS: The great Naval Base at the eastern end of the Mediterranean lies in the Nile Delta. Its fortresses, lakes and bays are here indicated in detail**



THE PROBLEM OF THE EASTERN MEDITERRANEAN: Conditions here are now governed by control of the air: it would appear that, following on their successes by land, this has definitely passed to the enemy. The Germans and Italians have eight well-established bases from which fighter and bomber aircraft can both operate: we have but three bases—and all these are at the extreme eastern end. We can, therefore, no longer pursue Admiral Cunningham's tactics of trailing our coat the whole length of the Mediterranean as in the days before Crete! By such tactics Admiral Cunningham reduced the Italian Navy to one-third its normal size

country, avoiding obstacles of marsh, sand and cliffs, and these are known only (we hope!) to our own troops; but on the whole one must regard the Qattara Depression as a very difficult and definite obstacle. It may be taken for certain that, though Rommel might possibly attempt a dangerous diversion with light patrols on this route, his main thrust with heavy tanks will occur on the plateau-lands.

The infrequent water is, for the most part, very salt, but there occur at Qara, Qattara and Moghara springs of water which may be regarded as just potable; and as this water is in the form of permanent springs the denial of them to the enemy may be a difficult problem.

The view reproduced at the top of the facing page is taken to the south-west of the Depression, looking along the edge of the weirdly-formed cliffs. They give some clue to the much-discussed origin of the Qattara Depression. The surface of the adjacent land is covered with a hard rock, overlying a much softer one. The weathering of the softer rock has induced a fantastic breaking away of rock which falls in cubes to the basin below or clings as a kind of jagged talus or scree to the sides of the otherwise vertical cliffs. Three oases cling more or less to the shadow of the cliffs—away from the immediate presence of the evil-smelling marsh.

There are numerous other depressions in the Libyan Desert, with their floors below sea-level; but they are not old marine basins. The current theory of their formation is that, from some local cause, the hard upper rock has become broken and the underlying soft rock exposed to the winds which, with the passage of time, have scooped out these hollows. The surrounding cliffs are high, reaching to several hundreds of feet.

A FEATURE OF THE MEDITERRANEAN WAR: The bravery of the little British supply ships which plied along the North African coast before the Fall of Tobruk and Mersa Matruh. Craft of all kinds, coastal tankers, cargo tramps, even schooners with Diesel engines—some slow and some antiquated—kept up a constant supply to our garrisons and desert armies, even under heavy air bombardments, to which they pluckily replied with what little guns they carried!—*Drawing by Wm. McDowell*

THE LAST HOURS IN TOBRUK Recorded in Special "Sphere" Drawings

HOW THE WARSHIPS AND NAVAL PERSONNEL GOT AWAY FROM TOBRUK under intense fire from the enemy's guns and from aircraft. The departing naval officers and men experienced a hot time on the quayside, whilst in the town other parties were busy on demolition work—*Drawing by E. Byatt*

For four days before Tobruk surrendered it had been under siege, so most supplies had been arriving by sea: there were, therefore, several naval craft and merchant vessels in the harbour. At 5 p.m. on Saturday, June 20—one day before the surrender—when it was evident that the enemy had broken through, all naval personnel in Tobruk were armed and ordered to fall in. As the demolition parties in the town carried out their duties, the naval men stood by awaiting orders. Then, suddenly, German tanks and armoured cars appeared on the escarpment and began blazing away. Coinciding with this penetration, a terrific air bombardment started, and our ships in the harbour defended themselves with pom-poms and other weapons. Apparently, the naval units in the harbour had been unaware of the fall of the town until the actual appearance of the German tanks. The ships took off one hundred naval ratings, including the personnel of the naval shore establishment. A number of vessels were sunk by shell fire or by bombing; but the remainder ran the gauntlet with success. There were no heavy vessels, such as cruisers or destroyers, in the port so far as is known: therefore the Germans, with their land artillery and tanks combined, had the advantage in fire power. The vessels which were brought out of Tobruk included minesweepers, trawlers, tank-carrying barges, and others. As they sailed out a battle raged between land and sea: the tanks co-operated with the enemy's long-range artillery to bombard the passage through the harbour defence-boom which all vessels had to negotiate. The two drawings reproduced on this page illustrate this final phase of the fighting at Tobruk.

GERMAN TANKS VERSUS DEPARTING BRITISH SHIPS. When the last vessels were clearing out of the harbour, enemy tanks came rushing down to the beach on the south shore and began shelling them as they passed through the defence booms: at the same time the ships were also being bombarded by long-range artillery. In spite of this concentrated effort, a number of the vessels got away with full loads of naval and other personnel—*Drawing by W. G. Whitaker*

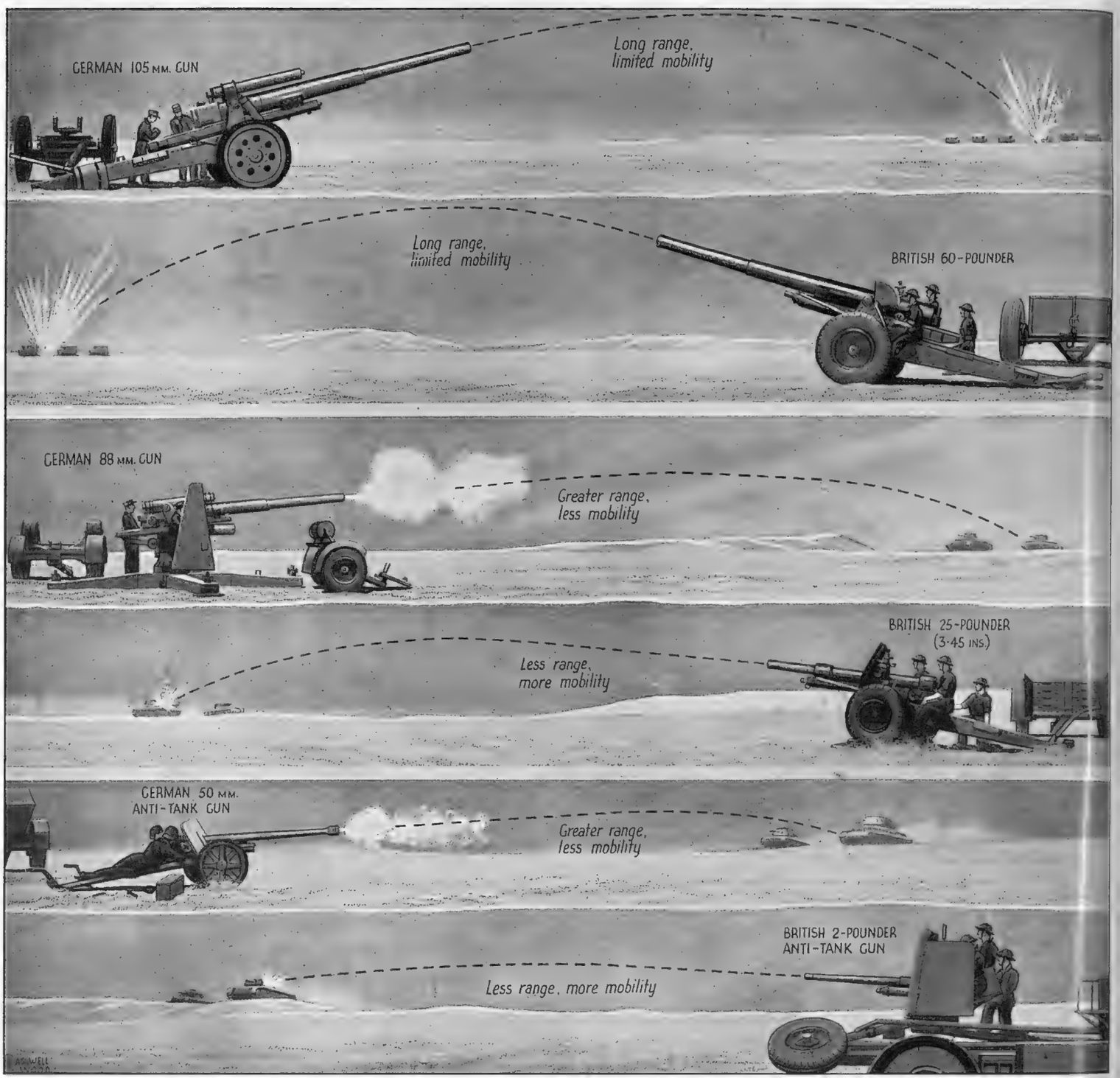
THE NIGHT DEFENCE OF TOBRUK TOWN: When the Germans had succeeded in penetrating the Tobruk defences, South Africans and odd military units put up a stubborn defence in the streets and houses of the town. The South Africans plastered the approaches with their guns all through the night of Saturday, the 20th, but the infiltration of the enemy (armed with grenades and tommy-guns) continued, house by house and street by street—*Drawing by E. Byatt*

It is now known that German parachute troops, landed on the beaches in the rear of the British garrison, helped to break the final resistance of the defenders of Tobruk. Small pockets of South African, British and Indian troops kept up a fierce resistance all through the fateful Saturday night long after the hopelessness of their position had become clear. At first under the light of a crescent moon, then in darkness, the South Africans fought on; desperate men, scorning surrender, they battled grimly as smoke from burning dumps poured down the wadis. But the enemy came on house by house, street by street, using hand grenades and tommy-guns, and supported by tanks. Early on Sunday morning the garrison surrendered

HOW THE R.A.F. SUPPORTED THE ARMY OFF THE NORTH AFRICAN COAST: British bombers catching an Axis transport vessel in the path of the moon as it attempted to run supplies and troops along the coast to Rommel's armies in the Libyan Desert—*Drawing by Montague Dawson*

The vessel was escorted by three destroyers when she was spotted by the R.A.F. A pilot officer jockeyed himself into a position from which the large merchant ship stood out clearly in the path of the moon: he was thus able to carry out a surprise attack, and his torpedo hit the ship in the stern. Escorting destroyers darted across the path of the moon to screen the ship from further attack, but the manœuvre failed. Evading intense fire from the four vessels, the Wing Commander then led another attack, firing a torpedo which also exploded in the ship's stern. Later a reconnaissance aircraft reported that the ship had sunk and that a hospital ship was picking up survivors

GUNS AND FIRE-POWER in the Desert Battles in Libya



A COMPARISON OF THE GERMAN AND BRITISH GUNS which participated in the heavy Libyan fighting—*Drawing by L. Ashwell Wood*

The British 60-pounder is more than a match for the German 105-mm. gun: both, however, suffer from their limited mobility, being very heavy to move about. (The German gun, incidentally, has solid tyres!) With the German 88-mm. gun, the enemy possesses the great advantage of outranging the British 25-pounder by about one and a quarter miles: but this is offset by the much greater mobility of the British gun—an important point in desert warfare. The German 88-mm. has to be lowered off its bogies, and four support legs have then to be opened out. The German 50-mm. anti-tank gun fires a much heavier shell over a greater range than our 2-pounder: but here again we have the other advantage of greater mobility

WHAT of the "GENERAL GRANTS"?

Were they powerful, but too slow? Did the element of surprise obscure the virtue of speed, which was the factor which gave us success in November?

IN the discussions following on our losses in the desert tank battles, the question of equipment must take a prominent part. What was the quality of our tanks in comparison with that of the enemy? Attention has inevitably been turned towards the impressive American-built "General Grants" of 28 tons (which, it has been reported since the battles at Knightsbridge and elsewhere, are now regarded as "obsolete," or outclassed, in the United States, where a better successor to the 28-ton type is now being built). Powerfully metalled the "Grants" undoubtedly were; and it is evident that—coupled with the element of surprise—they stood sturdily in the path of the enemy during the first three to four days of battle. The enemy badly hurt his knuckles on their tough hides during his first attempted rush to Tobruk.

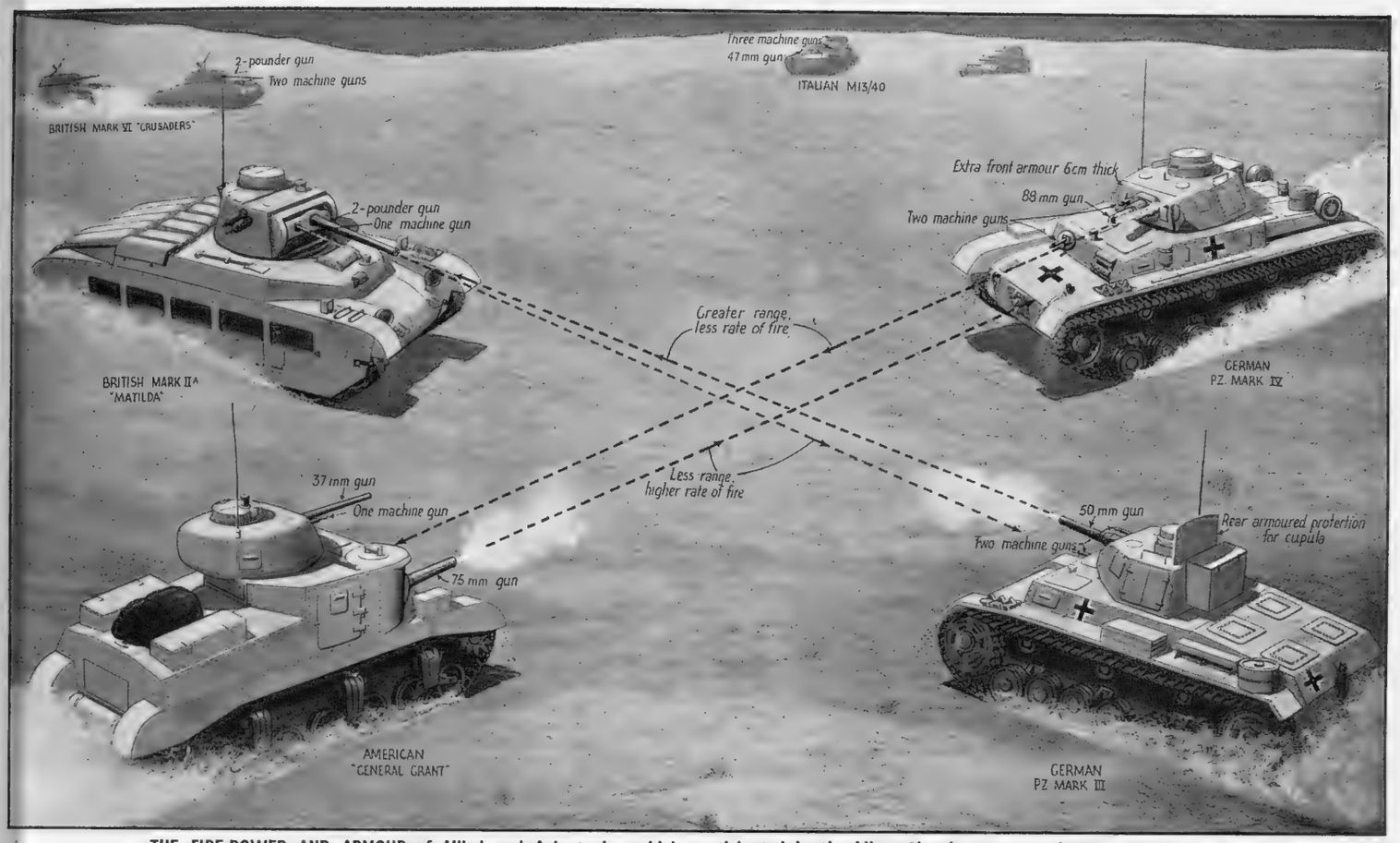
The question arises—was there a sufficiently strong force of these "Grants" to accomplish a definite purpose; or were they, like our original tanks on the Western Front in 1914-18, a surprise to the enemy but too few in numbers? The accumulation of evidence points to there being too few. It would appear that those on the battlefield served their purpose for a time; but there were few in reserve for further developments.

Here are two definite cases taken from newspaper reports of tank actions: (1) In a very early operation, the "Grants" were ordered to capture a ridge south-west of Knightsbridge, strongly held by German heavy anti-tank guns and artillery—a tough proposition in daylight. The "Grants" went in "slowly and brought the enemy gun positions under a heavy barrage while they themselves were outside the range of the German guns. Slowly shortening the range, they rolled up the ridge, shelling the Germans steadily. Light cruiser tanks swept in to complete the overrunning of the position." Two hundred and fifty prisoners surrendered as the 28-ton monsters rumbled through their positions.

(2) The second account runs as follows: "I saw the 'General Grants' go in repeatedly, plugging holes the size of car wheels. . . . One group of three trundled clumsily towards a group of anti-tank guns which had been giving trouble." These guns were majestically obliterated: but one cannot fail to note the adjectives used in the two accounts just quoted.

The "lordly movements," the "trundling gait," suggest a danger. The fast cruiser squadrons organised by General Auchinleck secured their successes by speed, swinging in to the attack and out again before the enemy could take any serious toll in exchange for the damage he received. The 28-ton "Grants" may well have slowed down the tempo of our attacks.

A certain amount of criticism has also been directed at the angle of fire possessed by the 75-mm. gun. Some observers have said that the tank itself had frequently to be lined up on the target to bring the turret to bear properly. There certainly seems to be a "blindness" in the photographs; nor does there appear to be a vast amount of room in the turret itself for loading the gun.



THE FIRE-POWER AND ARMOUR of Allied and Axis tanks, which participated in the Libyan battles, compared—*Drawing by L. Ashwell Wood*

The Germans have again surprised us by mounting a 88-mm. gun on their Mark IV. tank, together with extra armour-plating 6-cm. thick over the front of the turret. This gun outranges the 75-mm. of the American-built "General Grants," but against this the American tank carries another gun of 37-mm. calibre, and it also has a greater turn of speed. The British 2-pounder, although outranged, has a higher rate of fire than the German electrically-fired guns. The question of range in desert fighting is a difficult one, as so much depends on visibility—especially with sandstorms so frequent as they have been recently. The British "Crusader" tank relies on its speed, which is far in excess of anything possessed by the Axis

TANK TACTICS IN THE LIBYAN FIGHTING—Speed versus Weight in open tank warfare—*Drawing by S. W. Clatworthy* ***(Artist's copyright in the U.S.A.)***

The virtues of fire-power and range have been much discussed in connection with the battles around Knightsbridge and El Adem and Acroma. The British armoured forces have been lighter, but they have been notably speedier: and on the full open desert this is a virtue which can be most effectively employed. It is possible to employ free-moving columns almost exactly as light naval forces operating against heavier naval metal. This method was successfully employed by General Auchinleck himself in an earlier stage of the campaign, and was one of the factors which drove Rommel towards El Agheila. It would appear that a return to something of this situation came about last week, when one correspondent stated that "our new strategy is, in fact, a plan to treat the desert rather like the ocean, with independent naval units composed of all types operating separately." The conditions existing on the open desert recall the famous *Graf Spee* action, where weight and range on the one side were matched by speed and individual skill on the other. In the drawing reproduced above, an attempt has been made to show the conditions in broad diagrammatic fashion. In the centre is a force of heavy German metal; at a range of 1,000 yards the enemy vehicles create a danger zone for three light Allied columns attacking from three separate directions. These columns are moving much more rapidly than the Germans in the centre; they throw out smoke-screens, and dash in to their 800 yards' range, and then out again, inflicting damage with their greater rapidity of fire upon the enemy's broad flanks. In this way, the danger zone can be penetrated without undue loss, especially if dust and sand are helping to screen the attack

THE GOAL OF ROMMEL'S DRIVE: Two Striking Views of Alexandria

AN OVERHEAD VIEW OF THE TIGHT-PACKED CITY OF ALEXANDRIA, second town of Egypt and one of the most important commercial cities of the Mediterranean, towards which Rommel advanced at great speed. This picture was taken above the city's business quarter

There seems to be little doubt that Rommel's principal objective in his eastward drive is the great city and British naval base of Alexandria. Second town of Egypt, it is also one of the most famous and most important of all Mediterranean harbours. Within its breakwater, the Mediterranean Fleet has sheltered and refitted since the outbreak of war: and through its warehouses and wharves war material has flowed to the various Mediterranean arenas of war. A few years ago, its population numbered some 600,000, with Greeks and Italians preponderating amongst the European sections. Alexandria has two harbours—the Port Est, or "Great Harbours," and the Port Ouest, or "Harbour of the Safe Return." The approach from the west (the route which Marshal Rommel has followed) is not too easy, marshes and other obstacles being prominent

ALEXANDRIA HAS LONG BEEN A BRITISH NAVAL BASE OF THE HIGHEST IMPORTANCE: Here a flight of flying-boats operated by the R.A.F. are seen in the air above the Grand Port, which lies to the north of this great city in the Eastern Mediterranean

AN UNUSUAL NAVAL ENCOUNTER IN THE ENGLISH CHANNEL: A spirited action confined to small craft off the south-east coast of England, when German E-boats were engaged by our own light naval forces and driven off—*Drawing by Wm. McDowell*

TWO STRANGE SEA ENCOUNTERS

In the English Channel and in the Caribbean Sea

—Special Sphere drawings

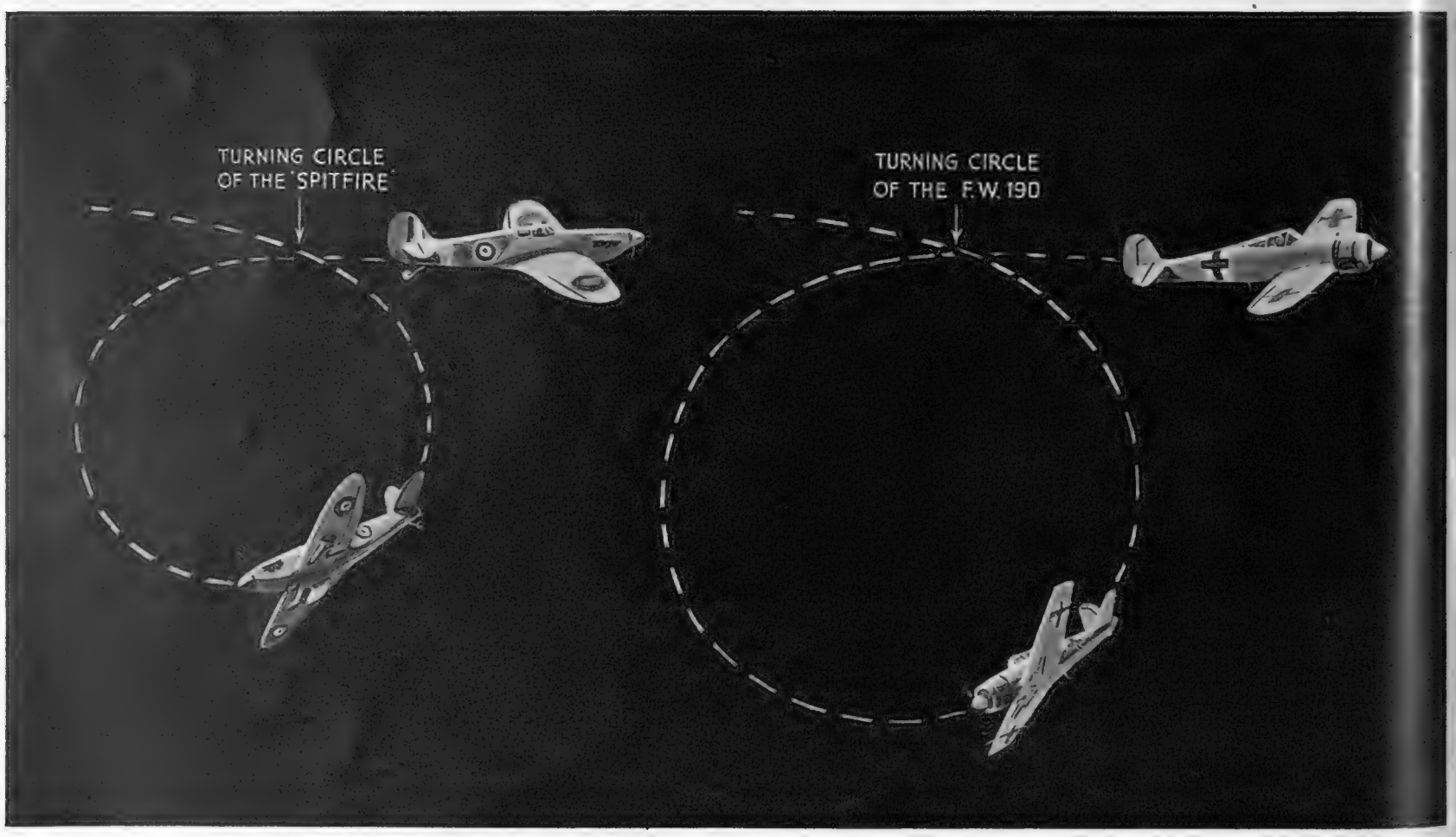
The above picture illustrates a recent engagement in which small craft were engaged in the early morning within a few miles of the south-east coast. A number of German E-boats approached, and our coastal-defence batteries immediately opened fire, continuing to shell the enemy for about ten minutes. They ceased fire when British light naval forces appeared and engaged the E-boats. After a short but spirited engagement the E-boats made off at high speed, back to their base on the Occupied Coast. In the foreground of the above drawing is a typical Nazi E-boat: note the "scoop"-shaped fore-end of the torpedo tubes, which affords some protection for the war head of the torpedo (carried in the tube) and which also allows its tail to fall clear. The drawing below shows the large German raider which has recently been operating in the Caribbean Sea: it is shown in the act of attacking a Panamanian merchantman. Survivors from the latter stated after rescue that their vessel was attacked by a sea raider "so big that it looked like the *Queen Mary*." Probably she was a big German ex-passenger liner. There appears to be something sinister about this type of vessel as Mr. McDowell has portrayed her. Where once she was spick and span with white paint, her hull is now a dingy grey-relieved by patches of red rust, as no time can be wasted on repainting. Her broad promenade decks are scarred and her lifeboats kept permanently swung outboard

THE BIG GERMAN RAIDER WHICH HAS RECENTLY BEEN OPERATING AMONGST THE WEST INDIAN ISLANDS OF THE CARIBBEAN SEA, "So big that it looked like the 'Queen Mary.'" She is here seen attacking a helpless merchantman, which she sank with gunfire (see notes above)—*Drawing by Wm. McDowell*

THE WAR BY AIR: Two Combat Pictures; and the British Power-Operated Turret

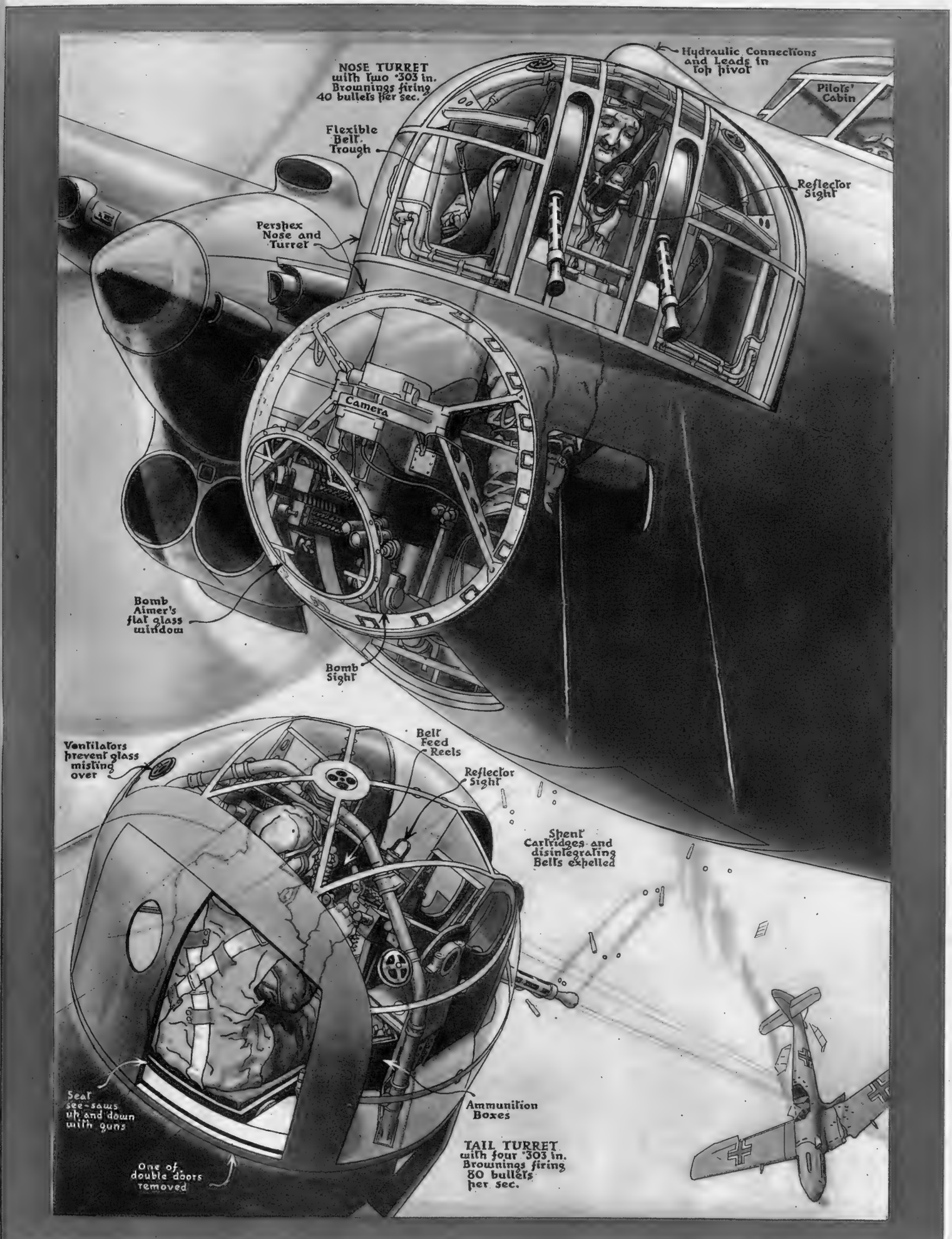
THE NEW DORNIER 217 BOMBER which was engaged and shot down by a Beaufighter whilst the latter was on a practice flight—*Drawing by Roland Davies*

The Dornier 217 aircraft pictured by Mr. Roland Davies above is one of Germany's latest bomber types. A few nights ago a Beaufighter had gone up for a practice flight from a fighter station in the north-east; aboard the "Beau" were the pilot and his observer. In the clear air and moonlight the pilot suddenly saw the Dornier coming in towards the coast, and he immediately engaged it: he gave it a five-second burst with his cannon-guns, and saw his shells hit the enemy. As he was unable to witness its complete destruction, however, the Dornier has only been claimed as "damaged." This new German bomber—the 217 E1—has two 1,600-h.p. B.M.W. motors; its maximum speed, with bombs, is 325 m.p.h. at 17,000 feet. The range of the aircraft is 1,010 miles at a cruising speed of 255 m.p.h. It ranks as one of the better German types



THE NEW GERMAN FIGHTER, THE F.W. 190, compared with our own well-tried Spitfire—*Drawing by Roland Davies*

The Germans have been making some very big claims for their new F.W.190 fighter. This aircraft is undoubtedly good, its principal virtue being its very high rate of climb; but our fighters can counteract this enemy advantage by being able to turn within a smaller area (as indicated in the drawing above). In armament, too, there is no comparison with ours; and this is a very vital consideration in modern air combat. The Spitfire to-day is undoubtedly still the finest all-round single-seater fighter in operation. During our daylight sweeps over France, the Germans have consistently made fictitious claims concerning the number of aircraft brought down. In this kind of offensive action over hostile territory—where a glycol leak may mean that a pilot can't get back—our losses were expected to be considerably higher than the Germans'. The reverse has been the case. Compare the results with the German losses over Britain in the autumn of 1940 and later, and the fact that the enemy is no longer capable of sending his forces here now in any numbers!



THE "SECOND GREATEST INVENTION OF THE AIR WAR"—The British power-operated gun turret of our bomber aircraft: how it is constructed and how its devastating guns are operated—*Drawing by S. W. Clatworthy (Artist's copyright in the U.S.A.)*

Next to the eight-gun fighters of the Hurricane and Spitfire type, with which we entered the war, the second greatest invention of the air war is the British power-operated gun turret, on which the outstanding success of our long-range bombing offensive practically depends. Bomber aircraft equipped with these wonderful turrets need no escort to protect them from enemy fighters. The drawing reproduced above shows typical front and rear turrets of the Frazer-Nash hydraulic type: the machine depicted is our biggest twin-engined bomber, the new Avro Manchester. The gunner's hands may be discerned on the gun trigger-grips: the double entry doors occupy less space when opened into the fuselage. Spent cartridges are not ejected from the front turret, as they might damage the aircraft itself. The nose turret is shown in the upper part of the drawing, with the two Browning guns which form an integral part of it; the whole turret can be swung to right or left under the gunner's control, and the guns can be elevated or lowered at will. The tail turret is shown below. The gunner's seat goes up and down in unison with the guns; the hydraulic power operating the movements of the turret comes from the main engines

LOOKING TOWARDS THE FUTURE . . .

Insurance is Now an Arduous and Complicated Undertaking, so Many and so Varied are its Forms. Within this Article are Discussed the Many Different Types of Business Transacted by the Leading Companies To-day, Including the very Difficult "Expectancy of Life" Amongst Serving Officers and Men

By CHARLES GRAVES

FEW subjects at the moment are more complicated than insurance in wartime. What with the War Risks Insurance Act, 1939 (Part II) and the War Damage Act (Part II), with its three categories of Private Chattels Scheme, General Scheme for Business Equipment and the Farmers Scheme for Plant Machinery, Crops and Live-stock, and still further schemes for Hospitals, Libraries and Charitable Trusts, on top of the ordinary House Insurance comprising both the building and contents, Life Insurance, Motor-car Policy and Jewellery Policy, it is hard to know where one stands. One would have thought that the insurance companies would have been badly hit by the war, but this is apparently not the case, except for those insurance concerns which specialise in industrial insurance and were hit by the raids on London and Coventry, in particular. It is true that the companies do not know to what extent their life-insurance policies have been affected by Libya. Out there a large proportion of the Army has consisted of cavalry and Guards regiments (now mechanised, of course), and one would presume that many more of them carried life-insurance policies than officers in less expensive Line regiments. . . .

Until the end of 1941 the claims rates on life policies did not exceed the normal figure of peace-time, although 45,000 officers and men were killed, and over 50,000 civilians lost their lives in air raids.

The premiums under life policies, including all war risks for officers in the Army and the Royal Air Force, vary, of course, according to the job and unit of the officer or man concerned. Members of ground crews, for example, would naturally pay a lower premium than air crews. Presumably, too, officers and men of the Royal Army Service Corps pay lower premiums than the men in the Royal Armoured Corps. (In view of the dive-bombing of transport columns, however, the concession in this case has probably been removed.)

Different companies have different theories about the expectancy of life of officers and men, as shown by the premiums they quote. But, taking them by and large, the premiums for officers in the Royal Air Force decrease heavily above the rank of wing commander, and considerably above the rank of group captain. In the case of a pilot officer or subaltern, the premium is so high that it would scarcely be worth considering, and quite impossible to meet out of Service pay. Twelve guineas a £100 is a typical minimum premium. In the last war premiums for life policies on officers in the Army rose to as much as £20 per cent. In this war, seven guineas per cent. is a normal figure.

But what happens in the case of officers and men who are officially reported missing is that the policy is converted to a paid-up policy without profits for the amount of the balance of the surrender value. So far, few cases of this sort have occurred; but there was an interesting action in the Law Courts the other day when a Royal Air Force pilot had been reported missing in June of 1940. The Judge refused to accept this official label, and would not presume death until further evidence was given by fellow pilots of the missing officer. Ordinarily, an Air Ministry certificate confirming a missing officer or man to be believed killed is accepted as a death certificate.

So much for life insurance in wartime, on which the companies say that they have no real experience on which to base their rates, despite the last war. One thing, war has changed very much in its character, and, secondly, life insurance before 1914 was much less common than it is to-day.

As for ordinary burglary insurance, several companies have felt the abnormal increase of burglaries—an increase caused by the call-up of large numbers of regular policemen and by the number of large houses which have been boarded up and left unattended by owners who have left for the safer country districts. Certain companies have also felt the effect of the Black Market indirectly. For it has been easy to trace the connection between numbers of warehouse thefts and the rationing or controlling of some commodities. As soon as silk stockings are hard to come by, for example, there is an outbreak of silk-stocking robberies. This holds good with tinned goods and all kinds of foodstuffs.

Recently there has been a big rise in the value of silver, both old and new. Immediately following this has come an increase in the number of thefts of old silver. One can only hope that the Board of Trade certificates to exporters of old silver to the United States and elsewhere keep a particularly careful check on silver which is exported. Some of it may well be stolen goods. I say this with some feeling, because some very close relatives of mine have been burgled, and their complete silver chest containing a lot of valuable old American silver was removed in its entirety.

Even now I do not really understand about one's contributions under the War Damage Act towards the repair of the fabric of buildings, or to the War Damage Chattels scheme. It seems, however, that the future contribution under Part I of the War Damage Act (the premiums are being payable by five annual instalments for the period ending August 31 of last year) is left in the air until the Government wants some more money. It would also appear that people who have a repairing lease and then are "blitzed" do not have to worry about the repairing lease, because war risks are normally excluded from them. In the case of goods destroyed in depositories, the repayment will not be made until after the war. But at least it will be made at the rate of the cost of replacement, less wear and depreciation in the case of modern goods, but plus appreciation in the case of antiques. Here the doctrine of indemnity—that the insured person should not make either a profit or a loss—still holds good. On the other hand, if your house is "blitzed" and uninhabitable, you still have to pay insurance to the Government on it, which seems somewhat harsh.

The Private Chattels scheme is also somewhat peculiar. The cover received under a policy is limited to £100 in the aggregate, or 20 per cent. of the total sum covered by the policy on works of art, gold and silver plate, jewellery, precious and semi-precious stones furs, and so forth. There is free compensation for furniture, clothing and other personal effects up to £300 if you are married and have your wife living with you. Beyond that, an additional cover can be obtained by paying a premium and taking out a policy of insurance. The terms are £1 per cent. up to £2,000, £1 10s. per cent. for the next £1,000 and £2 per cent. for the next £7,000. But in view of the fact already stated—that you can only get 20 per cent. of the total sum covered in the case of all works of art, gold and silver plate, jewellery, etc.—it is not surprising to hear unofficially that only £1,000,000 has been subscribed by the public compared with the £12,000,000 which the Government was expecting. After all, you cannot recover more than £50, or 5 per cent. of the total sum insured on any single article, so what, therefore, is the point of insuring a mink coat if you only get a tweed coat in return for it?

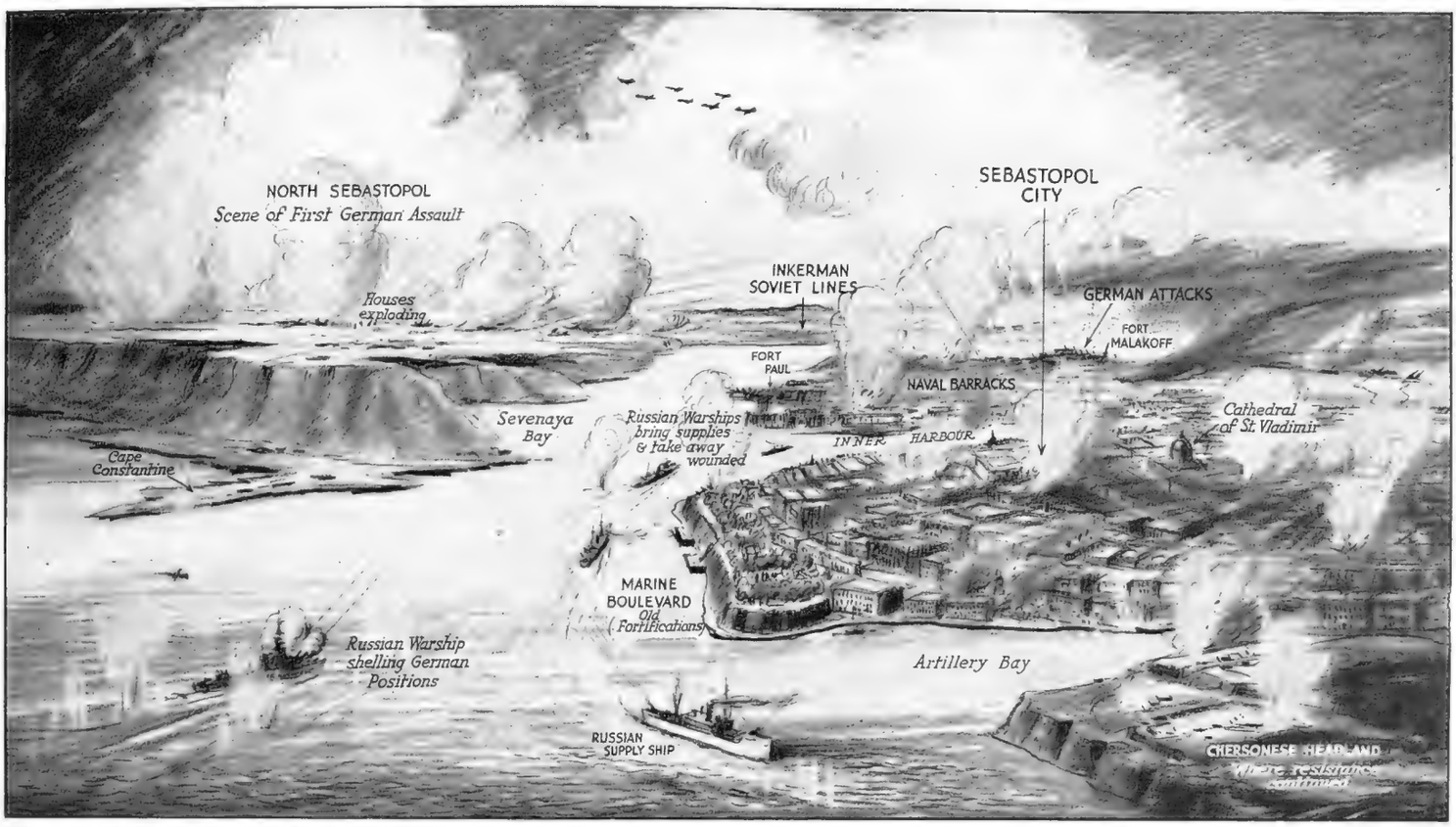
I believe, however, that Lloyd's famous Hundred-to-one policy against being killed in an air raid has been a huge success.

In conclusion, the war risks carried in ships (also done by Lloyd's) have risen a great deal (£10 per cent. for goods to South Africa is an instance)—for two reasons. One, of course, is the dangers of enemy action. The other is that many of the ships now being used are old ones which have been pressed into service, and for which Lloyd's would not have quoted normal rates even in peacetime.

P.S.—It seems a bit harsh that by present arrangements owners of "blitzed" and uninhabitable property are still compelled to pay contributions to the Government. The official reason is that contributions were originally fixed at 10s. in the £ on the annual value. But in view of the large sums involved, the payments were spread out over five years. It still reminds me, though, of the flowers that bloom in the spring, tra-la-la!

IN THE HEART OF THE INSURANCE CENTRE: Music and art at the Royal Exchange. This big and ancient building, which has not been used since the outbreak of war, is now transformed into a centre of artistic activity in the City of London. Dame Myra Hess (seen *on the right*) played at the first of a series of concerts to be given there by distinguished musicians. Art exhibitions will also be held at this spot

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export



THE LAST HOURS OF THE DEFENCE OF SEBASTOPOL: The scene looking into Sebastopol Harbour, with the main city on the right, and the northern section across the mile-wide water to the left. The defenders fought yard by yard, and were aided throughout by the guns of the Black Sea Fleet—*Drawing by Percy Home*

The FALL of SEBASTOPOL

Much of the fighting during the final days of the defence of Sebastopol took place under conditions peculiar to a fortress-city; but one phase indicates the intensity of the bombing to which fortifications and city itself were subjected, and strikes a familiar note in the ears of the bombed in this country! "We grew to hate the moon," it is recorded of the defenders. They, too, knew the relief of a dark, cloudy night when the German bombers could not safely put off from the aerodromes on the northern heights on the other side of the harbour.

For weeks the defence had been contesting fort after fort in the northern part of Sebastopol—the lesser part of the city which lies across the harbour. In the view given above, this district is shown on the left, with Cape Constantine in the foreground. One fort held out for days after the enemy had gained control of this area. Guns on the heights could bombard forts and city on the southern shore.

The city during the last days of the defence was subjected to a dual bombardment from land and air. The inhabitants went underground: fortunately this was possible in a rock-perched city such as Sebastopol. The fortifications, dovetailed into the rock, withstood the heavy pounding to an astonishing degree, recalling a similar failure to subdue them on the part of the British fleet during the Crimean War of 1854-55. The German attack worked round to the east and south-east of the main city, and the famous Malakof Tower became engaged in the defence. The solid defence works, rising in tiers, were defended floor by floor.

At the same time the Russian Navy and Mercantile Marine brought assistance to the stricken city. Ships under heavy fire put into the city quays; brought fresh supplies of ammunition; and took off wounded women and children. Russian warships sailed close in and bombarded the attacking Germans. Some good work was done by these units before they were compelled to retire, when at last the surviving forces evacuated the city in the opening week of this month. Resistance by the Russians was reported to be continuing on the Chersonese Peninsula to the west of the city.

A RUSSIAN ARMOURED TRAIN IN THE SEBASTOPOL SECTOR. It was named "The Iron Man," and bore an inscription which read "Death to the German Occupationists." The train caused great losses amongst the Germans

AN ANTI-AIRCRAFT BATTERY OF THE "PARISKAYA-KOMMUNA," 23,000-ton battleship of the Soviet Black Sea Fleet, standing ready to repulse an attack by German aircraft

SUBMARINE HUNTERS OF THE SOVIET NAVY, fast, small craft which kept watch on the waters around Sebastopol during the siege

THE COMMANDER OF THE RUSSIAN BLACK SEA FLEET, Admiral Oktyabrsky (in centre), on board the cruiser "Krasny Krym." After having played a large part in the defence of Sebastopol, the Russian warships have now taken Novorossisk, on the Caucasian coast at the eastern end of the Black Sea, as their base

MALTA FIGHTER-PILOTS

—By One of Them

Flight - Lieutenant Denis A. Barnham, who has just returned from the thick of it in Malta, brings back these drawings done by himself of some of the men who have been playing such a tremendous part in the defence of the Island in the face of almost continuous enemy onslaughts. Flight-Lieutenant Barnham, who has himself shot down several enemy planes, is full of praise for the work done by the defenders both on the ground and in the air

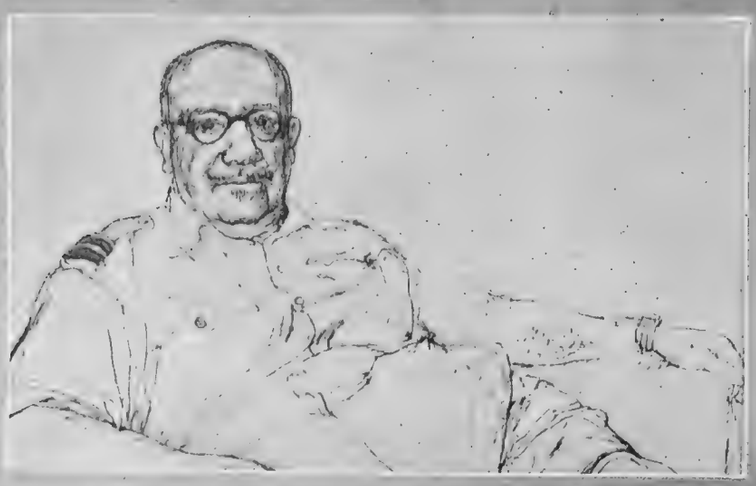
Squadron-Leader Gracie, who has destroyed many enemy bombers. These are his speciality : he ignores fighters completely ! He is a leading figure in R.A.F. circles on the Island ; and might be described as "a study in imperturbability"

"The Dreaded Parry"—a Rhodesian Flight-Lieutenant, known everywhere on the Island by this title. He has led the Squadron into battle many times over Malta with great effect

Above—**Flight-Lieutenant Plagis,** who has destroyed over 10 enemy aircraft. Like all South African pilots, he has marvellous eyesight

On right—**How to take dive-bombing :** The artist's impression of a fellow-pilot drawn at a moment when enemy Ju. 87's and 88's were busy attacking the aerodrome

Flying Officer Hone (after a haircut !). One of the quietest men in the Squadron, but one of the most destructive, as the enemy have good cause to know He comes from South Africa



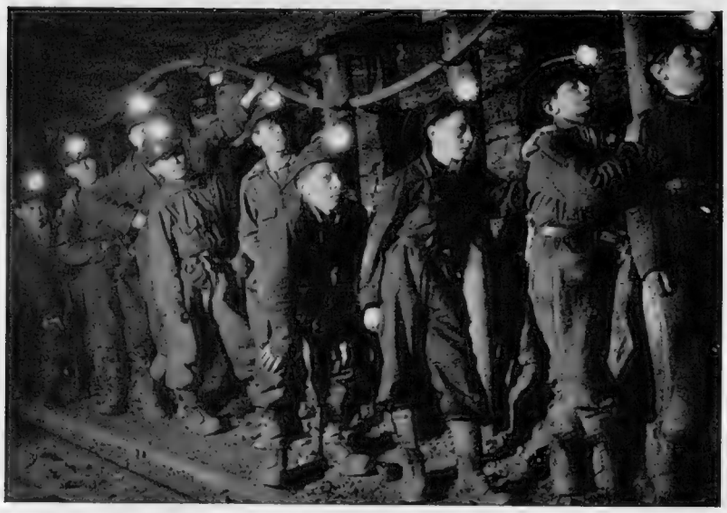
"Uncle"—Flight - Lieutenant Bosworth. Everybody's friend in Malta and a ministering angel to pilots in their few hours of ease. In the last war he commanded a Motor Torpedo Boat

A member of the Ground Staff : All these men are putting in yeoman work with amazing courage and endurance. Flight-Lieutenant Barnham was full of praise for their spirit and fortitude ; sometimes they are on duty for very long periods in face of heavy enemy dive-bombing

NEWS ITEMS IN PICTURES

BABIES SAVED BY "ICED MILK": The human milk being frozen into small tablets, ready for packing, at Queen Charlotte's Hospital in London

A THREE-WEEKS-OLD BABY GIRL, whose mother is Russian and whose father is Polish, would have lost her life but for the "frozen milk." She weighed only 3 lb. at birth: The Human Milk Bureau, provided and run by Queen Charlotte's Hospital, London, has been responsible for saving the lives of hundreds of babies. The milk is collected daily by trained nurses, reduced to ice-cream in a special giant refrigerator in the Hospital, and sent to forty-eight hospitals all over the country. The frozen milk keeps indefinitely, and this enables the Hospital to build up great supplies. Travelling priority is given by the railways to the small portable refrigerators when the need is urgent



THE MINERS OF TO-MORROW: A class of young miners wait for the tubs to arrive. Each holds about half a ton of coal, and the train is drawn over a railroad by pit ponies: At Ashington Colliery, in Northumberland, a year-old training scheme for pit boys has met with great success. The boys are given intensive instruction in such things as mining machinery, underground working methods, safety lamps, ventilation, first aid, mining history, and even citizenship. In the pit is a special Training Gallery: the instructors in this Gallery are all miners with years of experience gained at the actual coal-face

THE BOYS HAULING TUBS ALONG THE RAILS TO FORM A TRAIN: It is important that each of the pupils knows how to handle the tubs correctly

A MUSLIM FESTIVAL HELD AT SOUTH SHIELDS: More than 100 Muslims, from many parts of the country, paraded from their Cuthbert Street headquarters to the temporary Mosque in Spring Lane, South Shields, a few days ago. The service in the Mosque marked the end of the Festival of Et-ti-fal, which is observed every year in remembrance of Sheik Allowala, a notable Leader of the Faith. A B.B.C. recording van was in attendance, and records were made of the procession and Service for broadcast later to listeners in the Near East

BOYS TRAINING AS KEEPERS AT THE LONDON ZOO: Twelve boys between the ages of fourteen and sixteen—all of them animal lovers—are being trained at the Zoo to become keepers. They are working in the Camel, Small Bird, Pelican, Monkey, Lion and Cat Houses. Two of them in the picture reproduced here are being shown how to feed the pelicans

MEMORIES OF FIFTY YEARS—

An Experiment in Autobiography—XIV

By J. G.

A COUNTRY HOUSE. — I suppose almost every Briton forms in early youth from a tried model the picture of country life which delights and comforts him and gives him his pride and glory in England (or Scotland or Wales) as long as he lives. He may visit a hundred beauty spots and experience the delights of a score of country houses, but nearly always the ideal picture is taken from experiences made early in his life, and that picture remains hung on the line, and immovable. It was so, at any rate, with me. My ideal of the English country scene and country life, and country-house life, is, and has always been, derived from a smaller manor house in West Sussex where I spent many of the sunnier hours of youth. Mostly, these impressions were formed in summer time, although the warm, damp autumn and Christmas-season days contributed to the whole picture.

In my first book, and in my callow youth, I embarked on a word picture of the setting of that old house, and though it reveals triteness and faults of style and composition of which I am critical to-day, it contains the undiluted spirit of first impressions and is perhaps nearer to the truth than I could reach in late middle age. As such, I venture to reproduce it :—

"Sit in the old garden on a warm June evening under one of the great cedars, and the sun, now lower in the west, already half buried in the soft green foliage which crowns the hill opposite, glints and peers at you now and again between gently swaying branches. Far away a cuckoo is calling, his speech stammering, for already June is coming to an end.

"Swallows dart hither and thither under the eaves of the old Saxon church which nearly touches the house. That sturdy tower was there long before the house stood and long, long before the old cedars.

"Your back is turned to the house, and your eyes are fixed lovingly—for you are English—on the stretch of English country. A study in green, framed in pale blue and intersected by a silver band. Smooth lawns, flowering with rhododendrons, slope down to the little stream which meanders through the bright green meadows until it is lost to sight beneath a grey stone bridge as old as the church tower. There is a vivid flash of scarlet and bright blue darting down now which tells of a kingfisher seeking its river home and carrying its supper with it. And beyond the stream, green meadows stretch upwards to the hill, crowned and almost covered by the great wood, round which pigeons are circling and calling, while pheasants and rabbits are leaving its mysterious shadows for the sunlit field outside or darting back again to their shelter at the first approach of danger.

"And the peace of it and the silence! broken only by the late song of birds or the plashing of the water in the old Italian fountain; or far away a shepherd, homeward bound, calling to his dog. . ."

Great Traditions. — The house, built of grey stone and tiled with slate, is rambling and dignified. Of no great architectural pretensions, it incorporates some sixteenth-century brickwork, but in the main is Georgian with Victorian additions. It is the inside which holds its merits. The chief bedrooms, many of them hung with the charming sketches of Lady Diana Beauclerk, and each affording through the wide windows an intimate and individual view of the gardens and avenues, a view which almost amounts to "access," are fragrant and comfortable and restful to a rare degree. The living-rooms are spacious, dignified and comfortable, and furnished (until the present war) with the undisturbed accumulations of two hundred years of ownership by people of taste. There are many fine and interesting pictures, gracious furniture of a spacious age, and quantities of books in every room and in every passage. Among them are relics of famous guests, of whom Charles James Fox was perhaps the most notable and constant in the days when he represented the constituency. The history of the place can be traced from Saxon times as it evolved from manor and mill into a country house. It remained in the ownership of one family for many generations before the eighteenth century, and thereafter it passed by oblique inheritance or devise through many hands and came into the possession of the present family through the happy accident—appropriate and providential—of relationship on both sides to the late owners. So it was that the great traditions of culture, true religion, dignity, service and peace were maintained unbroken through the years of trouble and swift revolution which followed a long era of peace.

Time seems indeed to have stood still here. For generations hardly a brick was added to those which time had mellowed. One often felt that within this small, favoured and divinely-protected green angle, Nature had established her last reserve, and sanity, dignity and peace had made their final dispositions to resist the advances of turmoil, tastelessness, selfishness and iconoclasm. For ever, here at least, the scent of heliotrope, verbena and mown grass would pervade those sweet, airy bedrooms; for ever the music of the little river tumbling over the weir, the plash of Benvenuto's little fountain into its marble basin, mingling with the notes of English song-birds, would banish from this last, lost corner of Old England the sound of the grinding in the strident world outside.

A Glimpse of Immortality.—And indeed, though there is no acre of this land of ours to-day which can claim to have been spared the tragedies of two World Wars, this old Sussex manor house still remains at peace, inviolate; still stands for peace of mind in suffering, for faith in times of trial, cheerfulness in adversity, a triumph of spirit, an unstormed stronghold of the noblest ideals and traditions of our race which have made us as a nation what we are, and typify those things which we have fought so desperately and so long to preserve. In my memories of the place, the influence it should has been constantly noble, stimulating, cheerful, brave and happy. Permanence, immortality, personal survival—these are, first and foremost, the unsatisfied and unsatisfiable cravings of humanity. If the proofs were forthcoming, if our faith in such of them as we examine were itself proof against new doubts, there would be no tears in things, no victory for death, no pathos to be poured out on the high hopes of youth, the disillusion of middle age, the loneliness and suffering of old age.

The spirit and the body are two, not one—in that fact lie both the tragedy of living and our hope of immortality. They must march together to the dividing road, their partnership growing less easy with the years, as the body ages and the spirit refuses to yield up the dreams of youth. Many poets and thinkers have found their truths and philosophies and faiths in gardens. And in this garden which I have described, I have gone near to such discoveries. Many men and women and young people in my time have loved it. If our faith could achieve so much as this: to accept it that something of each of them survives Death, and adds harmony to the music of its birds and waters, and merges in the scents and colour of its lawns and meadows, is one with its peace at sunrise and at sunset, *that* were immortality enough for my satisfaction; *that* would afford secure permanence to the place.

To merge with its peace, to commune with the spirits of those who within my memories peopled it and loved it, that were for me, at any rate, Immortality (and present comfort) enough.

(The next article in this series will be published in the issue of July 25)

THE COUNTRYSIDE IS ALREADY PREPARING FOR THE WINTER! In pre-war days much cattle fodder was imported into the country. Now, to save valuable shipping space, silage has become of the greatest importance for the winter feeding of cattle. Fresh-cut grass is put in a large container and mixed with molasses: this can then be used for the cake so necessary for cattle when grazing is not possible. The picture above was taken at Slindon, in Sussex

THE HAYMAKING "SWEEP" WHICH LIFTS THE HAY TO THE TOP OF THE STACK: Haymaking on Battler's Green Farm in Hertfordshire has been greatly speeded up by the use of a mechanical "stacker." This is composed of two sweeps—one of which is tractor-driven and brings the hay to the stack; the other takes the hay and "sweeps" it up to the top. This eliminates ground labour and requires only farm hands up aloft to spread the hay properly

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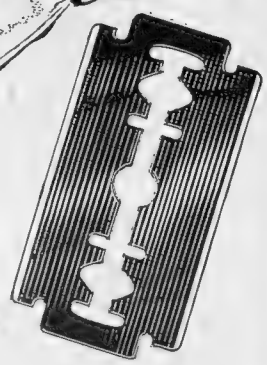

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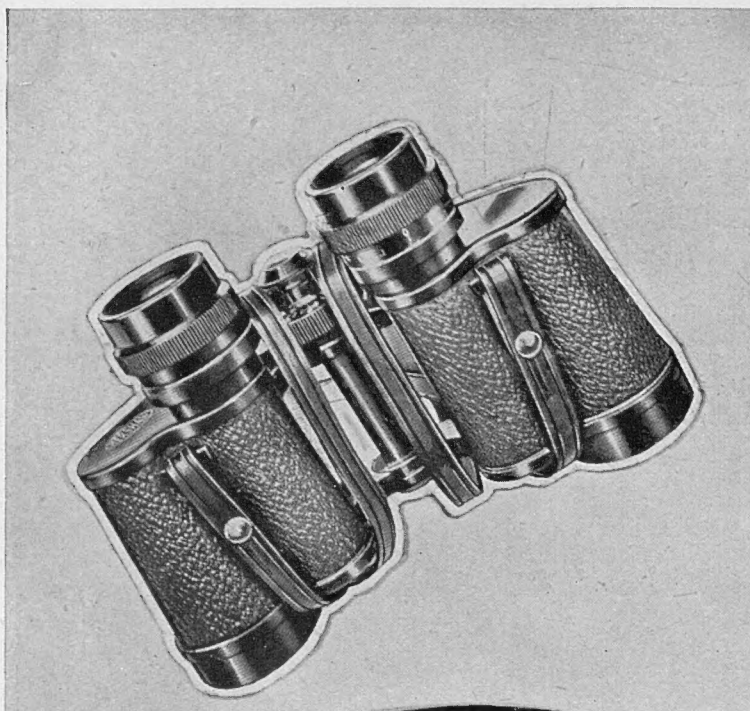

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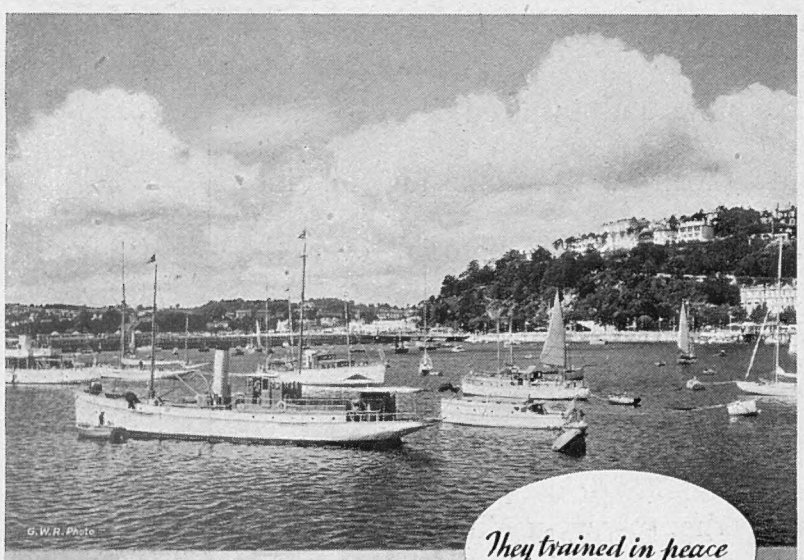

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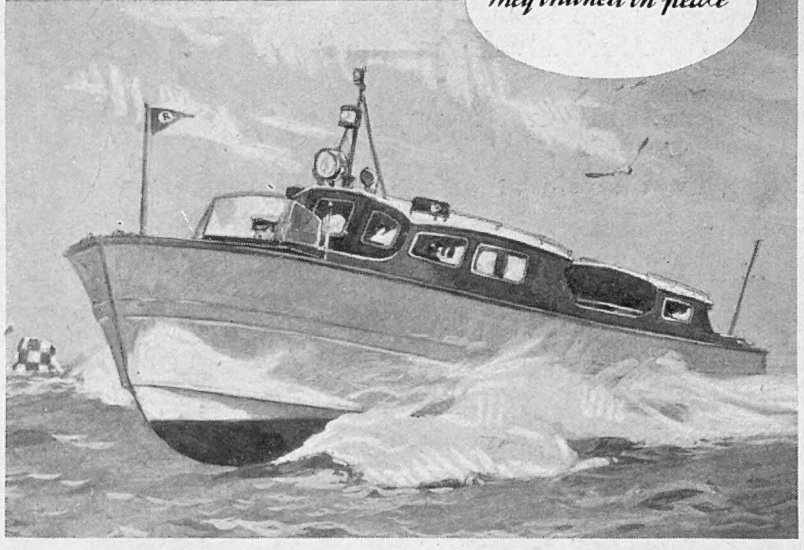

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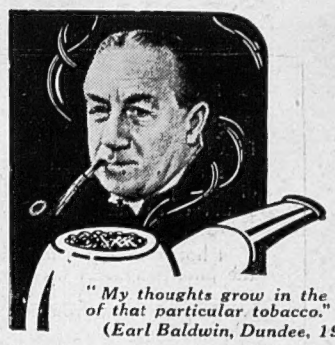

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